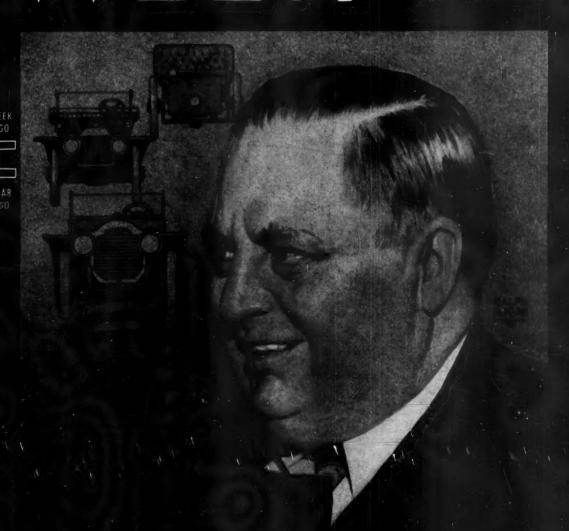
# USINESS WEEK

AUG. 21, 1948



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BUSINESS WEEK NDEX.

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ADVERTISING MANAGER H. C. Sturm

BUSINESS WEEK . AUGUST 21 . NUMBER 990

(with which are combined The Annalist and the Magazine of Business) • Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder • Publication Office 90-129 North Broadway, Albany 1, N. Y. Return postage guaranteed • Editorial and Executive Offices, 30 W. 42nd St., New York 18 • James H. McGraw, Jr. President; Curtis W. McGraw, Vice-President and Treasurer; Eugene Duffield, Executive Assistant for Publications; Nelson Bond, Director of Advertising; Joseph A. Gerardi, Secretary. Address correspondence regarding subscriptions to J. Eliackburn, Jr., Director of Circulation, Rusiness Week, 9129 N. Broadway, Albany 1, N. Y., or 330 West 42nd St. New York 18. Allow ten days for change of address. Subscriptions to Business Week are solicited easy from management-men in business and industry. Position and company connection must be clearly indicated on subscription orders.

Single copies 25c. Subscription rates—United States and possessions \$6.00 a year. Canada \$7.00 a year. Pan Americas countries \$10 a year • All other countries \$20 a year • Entered as second class matter Dec. 4, 1936, at the Post Office at Albany, N. Y., under Act of Mar. 3, 1879 • Printed in U. S. A. Copyright 1948 by McGraw-Hill Publishing Ca. Inc.—All Rights Reserved.





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### THE COVER

When George W. Mason works and talks, he likes to chew on a cigar. Sometimes, consequently, his words are hard to understand. But his associates and competitors in the auto and appliance industries know that his terse sentences generally make crystal-clear sense.

Mason speaks for the auto industry, not only as president of Nash-Kelvinator Corp., but also as president of the Automobile Manufacturers Assn. He took the association office early in 1946, has handled it in typical fashion—saying little, and sawing wood. Last week Mason's A.M.A., adding up years of statistics, pointed to a milestone: The U. S. auto industry had built its 100,000,000th vehicle.

• Beginnings—Mason saw the beginnings of the modern auto industry at Studebaker, Dodge, and Maxwell. Walter P. Chrysler thought enough of him to make him the first works manager of Chrysler Corp. in 1921.

Mason switched from autos to refrigeration in 1926, when he joined Copeland Products, Inc., as vice-president; a year later he was elected president. He became president of Kelvinator in 1928; before long that venerable refrigeration concern had quadrupled its output.

The late auto-maker Charles W. Nash was aging and looking around for a right hand. His choice was Mason. To get Mason he had to get Kelvinator; in 1936 the companies were merged as Nash-Kelvinator Corp., under Mason's presidency. Mason spent a few years rebuilding Nash operations. At the end he had a bustling, profitable company.

• Long Climb-From a North Dakota farmboy to today's automotive eminence is a long way-about as long as the distance between his first job, pulling mustard at 50¢ a week, and today's four-figure-per-week income. Now, at 57, Mason would rather look aheadto his own company's new cars (due in a few months), and to the ever-growing importance of the auto industry.

-Complete story on automobile production starts on page 26. Cover painting by Ralph Iligan

PAG

### BUSINESS OUTLOOK

BUSINESS WEEK AUGUST 21, 1948



Don't let it bother you if business drags a little here and there. These are the dog days.

But keep a close eye on sales and production from now on. The regular fall upturn should be starting soon. The way business responds will be a tipoff on what's ahead for the rest of 1948 and early 1949.

The last quarter makes or breaks the year for retailers—and for many manufacturers.

It will be doubly important this year. Inventories of finished goods are heavy up and down the line (BW-Aug.7'48,p22). If they don't move, plenty of businessmen will wind up holding goods they don't want.

You hear a lot of deflation talk these days. Most of it is just an echo of the price break in agricultural commodities (page 90).

But farm prices aren't the only weak spots on the boom.

In textiles and shoes, the standoff between buyers and sellers drags on. Production in these lines is off significantly.

Sales of some of the heavy appliances probably will suffer when consumer credit regulation comes back. So will jewelry.

Cotton textile men curse the glowing crop prospects.

Two weeks ago all signs pointed to an early pickup in business. Then the government forecast a 15.2-million bale crop (BW-Aug.14'48,p9).

Now buyers are holding back their orders. They hope the prospect of an outsize surplus of fiber will force prices down.

Some of the big mills are quietly trimming prices on individual items. But they balk at a general scaledown. Rather than that, they would cut production.

If you want to keep a running check on the textile industry, watch the bidding on military contracts. Recent invitations brought heavy oversubscriptions—especially for hosiery and underwear.

On the hosiery contracts, the government got bids from jobbers as well as from mills. That shows there's a sizable inventory floating around.

Worsted producers are holding their breath these days.

They have just hiked prices about 5% on their spring lines for next year. That's flying in the face of the sales figures. Volume in men's clothing has begun to slip lately.

And now, Dan River Mills says that it won't up prices on its spring line of rayon suitings.

Rayon producers are making a big play for the summer suit business.

The widening price gap between rayon and tropical worsted will help them.

Actually, a jump of only 5% is a sign of uneasiness among the worsted men. The trade had figured on considerably more than that. But American Woolen set the pattern with an eye on lagging retail sales. Other producers fell more or less in line.

The biggest prop under business now is government spending for arms and European aid.

President Truman's midyear budget review forecasts a national defense program of \$12.1-billion in the fiscal year ending next June. Foreign aid

### BUSINESS OUTLOOK (Continued)

BUSINESS WEEK AUGUST 21, 1948 is down for about \$7-billion. That makes \$19-billion altogether—almost \$4-billion more than the government spent in fiscal 1948.

Truman says the budget will run a deficit of \$1.5-billion in the coming year. The Republicans say there will be a surplus—maybe as much as \$6-billion.

Truman undoubtedly is underestimating the tax take at present income levels (page 15). The Republicans are doing some fast bookkeeping with \$3-billion transferred from last year's surplus to this year's budget.

As far as business is concerned, it doesn't matter.

The important thing for the businessman is simply this: For some time anyway, the Treasury won't have a surplus big enough to be an important weapon against inflation.

The boom in homebuilding is going stronger than ever.

Builders started work on 94,000 new dwellings in July. That's a couple of thousand less than June. But it's almost 13,000 over last year.

July was the fourth month with more than 90,000 starts. For the first seven months of the year, starts came to 550,000. If builders hold that pace they will put up 900,000 to 950,000 units this year.

The temporary lapse of Title VI federal mortgage insurance didn't make much difference in building. But that doesn't mean that the real estate boom can run without mortgage money.

Recordings of nonfarm mortgages hit \$5.7-billion in the first half of 1948. That's 8% over 1947 and 20% over 1946.

The railroads are coming back to the Interstate Commerce Commission for another rate hike—7% this time.

Increases already granted have shoved rates about 44% over wartime levels. And the new request won't be the end of the line. There is another round of wage hikes coming up for the roads.

As soon as the wage issue is settled, the roads will tack still another request onto the 7% plea.

Railroad men aren't at all sure that higher rates will solve their problems. Traffic may fall off more than revenue rises.

There has been a definite drop in L.C.L. traffic since rates started going up. The roads were losing money on L.C.L. and so they don't mind that.

But total carloadings are also running a little behind last year. By contrast, truck operators show more than a 10% gain this year.

Most consumers still keep ahead of the income-outgo game.

Last year's price rises made a dent in their incomes. But the Federal Reserve Survey of Consumer Finances (page 23) shows that two out of three still managed to put something by from 1947 incomes.

That means there's a big cushion under buying power—even at today's prices. But marketing men will want to take a closer look at the figures.

A good 35% of the demand for hard goods came from consumers with incomes of less than 3,000. So did 40% of the demand for other consumer goods. But this group did comparatively little saving. Many of its members drew down their savings or went into debt.

That kind of demand dries up in a hurry when income starts to shrink.

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### FIGURES OF THE WEEK

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1945 1946 1947 1948	Juju	FMA	1948	A S O	16 W
	§ Latest Week	Preceding Week	Month Ago	Year Ago	194 Avero
Business Week Index (above)	*194.3	†194.7	194.0	184.4	162
PRODUCTION					
Steel ingot operations (% of capacity)	95.0	94.9	93.1	92.8	97
Production of automobiles and trucks	112,102	1108,864	120,741	83,501	98,2
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands) Electric power output (million kilowatt-hours)	\$24,141 5,318	\$25,227 5,319	\$26,063 5,197	\$15,724 4,923	\$19,4
Crude oil (daily average, 1,000 bbls.).	5,507	5,505	5,444	5,159	3,8
Bituminous coal (daily average, 1,000 tons)	2,026	12,078	1,963	1,966	1,6
RADE					
Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars)	80	81	81	84	
All other carloadings (daily average, 1,000 cars)	67	68	66	67	60.6
Money in circulation (millions)	\$27,966 +16%	\$27,922 +7%	\$27,959 -5%	\$28,223 -2%	\$9,6
Business failures (Dun & Bradstreet, number)	103	116	91	78	2
RICES (Average for the week)					
Spot commodity index (Moody's, Dec. 31, 1931=100)	428.0	428.1	431.2	421.4	198
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)	279.2	†281.2	275.6	268.3	138
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)	355.3 \$93.55	354.8 \$93.55	382.9 \$80.27	374.5 \$75.41	146 \$56.
Finished steel composite (Steel, ton)	\$43.16	\$43.16	\$41.33	\$37.92	\$19.
Copper (electrolytic, Connecticut Valley, lb.)	23.500€	23.215¢	21.500e	21.500e	12.02
Wheat (Kansas City, bu.)	\$2.16	\$2.12	\$2.21	\$2.29	\$0.
Sugar (raw, delivered New York, lb.)	5.78¢	5.79¢	5.70¢	6.32¢	3.3
Cotton (middling, ten designated markets, lb.)	31.33¢	31.75¢	33.63¢	34.38¢	13.9
Wool tops (New York, lb.)  Rubber (ribbed smoked sheets, New York, lb.)	\$1.789 23.67¢	\$1.784 24.80e	\$1.965 24.30¢	\$1.702 15.26e	\$1.2
	23.076	24.00€	24.30¢	15.20¢	22.1
90 stocks, price index (Standard & Poor's Corp.)	125.5	126.4	127.9	122.9	78
Medium grade corporate bond yield (30 Baa issues, Moody's)	3.44%	3.42%	3.37%	3.16%	4.33
High grade corporate bond yield (30 Aaa issues, Moody's)	2.85%	2.84%	2.81%	2.56%	2.77
Call loans renewal rate, N. Y. Stock Exchange (daily average)	11%	11%	11%	14-14%	1.00
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	11%	13%	13%	1%	1-1
ANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	46,703	46,777	46,427	46,574	++27,7
Total loans and investments, reporting member banks	63,032	63,168	62,857	63,513	1132,3
Commercial and agricultural loans, reporting member banks	14,819	14,627	14,481	12,238	††6,9 ††1,0
U. S. gov't and gov't guaranteed obligations held, reporting member banks	34,652	35,023	34,656	38,588	++15,9
	4,341	4,341	4,300	4,228	114,30
Other securities held, reporting member banks				779	5,2
Other securities held, reporting member banks	1,050	780	950		29,60
	1,050 22,064	21,897	22,139	22,494	2,26

# Industrial Housing

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### WASHINGTON OUTLOOK



**DEWEY IS WONDERING** what to do about Taft—next year.

Congress in general doesn't look like much of a problem. The Dewey team thinks it will have the House pretty well lined up. The same goes for the first-termers who make up the core of the G.O.P. majority in the Senate.

But Taft is his own man, no easy cog in a Dewey machine. Yet he's the natural leader for the Senate next year; by common consent he was the leader of the whole party until Philadelphia.

And already Taft is making it plain that he reserves the right to oppose Dewey where their principles differ.

So Dewey is thinking over this harsh political choice:

Shall he acknowledge Taft's standing and deal with him on the issues as they come up? That would involve a constant risk of friction in the smooth legislative operation that has been a Dewey trademark in New York. Or —

Shall he try to block Taft outright at the start of the session by openly putting up a Dewey candidate for leader? This would be a high-stakes gamble; victory would insure clear sailing for Dewey's program, but defeat could threaten White House control of the new government.

There's an added difficulty in a showdown with Taft: finding a suitable opponent. Sen. Lodge of Massachusetts would best fill the bill: At 46 he has a future in a new administration; he's an internationalist; and he has 10 years' service—as much as Taft.

On the other hand, Lodge has no relish for such a contest.

Of course, Dewey may not have to face up to this decision, after all. As we have suggested before (BW-Jul.17'48,p15), the voters might take the problem out of his hands by electing a Democratic majority to the Senate in November.

**THE DEWEY PROGRAM** is already certain to be in cooperative hands in the House.

To be Speaker of the House of Representatives under a president of his own party has always been Joe Martin's real aspiration. So Dewey has no worries about the House being kept in line.

You can even expect the obstreperous Taber and Knutson to behave next year. Both men have assured Dewey they intend to work with him—that

the cutting up they have done under the Democrats was just their idea of proper minority tactics.

So there's a lot of legislation which deadlocked in the 80th Congress that Dewey will put through the 81st Congress.

Probable examples: higher minimum wage; federal grants-in-aid for education, health, housing, and science; broadened social security; tax reform.

**THE BUDGET BUREAU** had to do some fancy figuring to come up with a midyear financial prediction pessimistic enough to satisfy Truman.

A month ago (BW-Jul.17'48,p16), the bureau adding-machine operators told Truman that federal revenues and expenses would just about balance out in the current fiscal year.

That ammunition was of the wrong caliber for Truman's gunning at Congress. So the bookkeepers sharpened their pencils, made some "policy decisions," and came up with a deficit of  $1\frac{1}{2}$ -billion.

Here's how they did it:

- (1) They counted as expenses \$942-million for veterans that Congress turned down this year but which Truman hopes to ask for again in January before Dewey comes in.
- (2) They ignored the lag between the time Paul Hoffman's ECA O.K.'s a purchase and the time the Treasury pays for it. Result: Published spending estimates include more than a \$500-million that actually won't be paid out until next fiscal year.
- (3) They held their revenue estimates to \$40.7-billion by figuring income taxes receipts on a base of \$200-billion annual personal income (it's running at a \$212-billion rate now, and rising).

All in all, the realistic prospect for fiscal '49 is for a \$3-billion to \$4-billion surplus.

Sen. Millikin, of course, calls it a \$6-billion to \$7-billion surplus. That's because he still takes seriously that paper transfer he cooked up to count \$3-billion of 1948's huge surplus as 1949 revenue.

Even counted straight, however, the prospective surplus leaves the G.O.P. room to retire a little debt and still cut some excise taxes. However, as we've said before, personal income taxes won't change.

GADFLY OF THE CABINET is turning out to be Commerce Secretary Sawyer—who was as-

### WASHINGTON OUTLOOK (Continued)

sumed to be a ho-hum nominee when Truman brought him in from Ohio to replace Harriman.

These days, nearly anywhere you turn you find Sawyer in somebody's hair—sometimes it's his Democratic colleagues', sometimes Republican congressmen's.

A couple of his current enterprises:

(1) Campaigning for lower grain exports to Europe. He thinks the U. S. housewife ought to get the benefit, in prices, of whopping crops. (This is a nuisance to Agriculture Secretary Brannan, who is boosting European shipments from grain he will be swamped with anyway, under the price-support law.)

(2) Needling Rep. Ploeser, the small businessman's advocate, who had complained about steel exports.

Wrote Sawyer: "I appreciate greatly your willingness to disclose to me your amazement that Sweden imported 286,560 tons. . . . I think you can relax and face the situation with a certain degree of calmness when I explain [that exports this year are lower]. . . You will agree with me that only the valor of ignorance would suggest as a solution to the problem that we completely eliminate exports. . . "

THE TAFT-HARTLEY VOTING RECORD is slipping into third place among factors determining who gets union labor support for Congress.

Prices and housing, in that order, are the issues both C.I.O.-P.A.C. and A.F.L. are looking at before endorsing congressional candidates.

And it's in the congressional contests that the unions are going to spend their money this year; they can't work up much interest in the Truman-Dewey race.

Even for the House contests, there isn't going to be much union money to spend; under Taft-Hartley, unions have to collect political contributions, dollar by dollar, from individual workers.

So both P.A.C. and A.F.L. are concentrating their funds on beating Republicans they think can be beaten.

A.F.L. has a list of 125 districts where the G.O.P. won in '46 but where Democrats have won at least once since 1932.

C.I.O.'s list is smaller—about 70. Phil Murray's strategists listed districts that went Republican by 55% or less last time, then crossed off those where C.I.O. has few members.

The big problem both union groups face:

Many of the districts they have picked have been invaded by Wallace Progressive Party candidates who will split the New Deal vote (BW-Aug. 14'48, p16).

On the Senate side, both A.F.L. and C.I.O. have tagged five sitting Republicans for defeat—Brooks in Illinois, Robertson in Wyoming, Revercomb in West Virginia, Ball in Minnesota, Buck in Delaware. Progressives complicate the Senate situation, too—in Illinois and Minnesota.

### THIS IS SHOWDOWN WEEK on draft deferments.

The National Resources Planning Board has put on Truman's desk a proposed executive order giving it final authority over industrial and technical deferments. The order would channel appeals from local draft board decisions to committees of experts run by NSRB.

Gen. Hershey doesn't trust experts. He thinks in terms of preservation of the family and how your neighbors look at it, rather than manpower utilization. So he is trying to block NSRB's order, keep the appeals machinery inside his own shop (BW-Jul.17'48,p15).

Truman already has a congressional O.K. to back NSRB; both the House and Senate military committees recommended Resources Board review.

WHO WILL BEAT WHOM to the punch in coming up with the idea of a big-name commission to tackle the whole spies-Reds loyalty mess?

Defense Secretary Forrestal has been urging Truman to appoint some people like Justice Roberts and Judge Learned Hand; now this looks like a way to take the play away from the Thomas committee circus.

The same idea is being hashed over at Albany by Dewey people as a way to cash in politically on the public concern—and maybe get some considered conclusions that Dewey may be able to use next year.

• Rep. McCormack's bill to coin a 7¢ piece is catching on with coin-machine venders. But cashiers point out that you can't make change with it; they suggest 2½¢—"hafnik"—and 12½¢—"bit"—coins instead. . . .

Trend: Of ECA's first \$1-billion authorizations,
 12% went for recovery items, the rest for relief.
 Last week's ratio was 25% for recovery.



Pork trimming, boning and loin pulling table of stainless steel.

# From "on the hoof" to "on your table" ... The Meat Packing Industry Guards Quality and Purity

The American people...comprising less than 6% of the earth's population...eat approximately 25% of the world's meat.

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Daily, droves of hogs, cattle and sheep are turned into cuts for the housewife by approximately four thousand meat packing companies spread from coast to coast.

At every step in killing, dressing, chilling, storing and transporting meat, packers maintain stringent inspections to assure product purity...

In addition, continuous advances characterize the industry's processing and packaging, as exemplified by appetizing arrays of easy-to-fix, savory meat products.

And credit the meat packers for outstanding innovations ... the refrigerator car, for example ... and the conveyor system now used throughout industry to move material past workers.

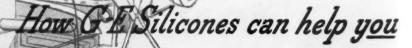
For years the technical staffs of International Nickel have cooperated with equipment designers, engineers, metallurgists, research and operations men in the meat packing industry on a wide range of metal problems. To this extent they have contributed to the continuing improvements in performance of meat processing equipment.

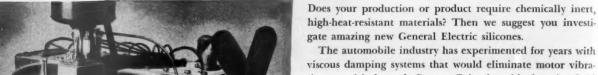
Through this and comparable experience gained in technical service throughout industry, International Nickel has accumulated a fund of useful information on the properties, treatment, fabrication and performance of engineering alloy steels, stainless steels, cast irons, brasses, bronzes, nickel silver, cupro-nickel and other alloys containing nickel. This information is yours for the asking, Write for "List A" of available publications.



THE INTERNATIONAL NICKEL COMPANY, INC. NEW YORK 5, N. Y.







viscous damping systems that would eliminate motor vibrations at critical speeds. But a sufficiently stable damping fluid —one that did not change viscosity with temperature changes and that did not break down under heavy shear loads—was lacking. Now motor engineers have found that new G-E silicone oils are ideal for this application.

These viscous silicone oils remain stable within a temperature range of -55 to 300 F. Already they are being used in vibration damping systems for passenger cars and heavier diesel-driven equipment.

### Put G-E Silicones to Work for You

Have you heard about G-E silicone resins? These materials are unequalled for electrical insulation and other applica-

tions where extremes of temperature must be overcome. When available for synthetic enamels applicable to many products, these resins will make possible a finish with characteristics of durability never before achieved.

WANT TO KNOW MORE ABOUT G-E SILICONES? Let's talk over your production problem. You'll be amazed at the versatility of these materials. Chemical Department, General Electric Company, Pittsfield, Massachusetts.

Please address inquiries about G-E silicones to Resin and Insulation Materials Division, Chemical Department, General Electric Company, Schencetady 5, N. Y.





### BUSINESS WEEK

NUMBER 990

**AUGUST 21, 1948** 

### What 528 Management Men Think of Taft-Hartley Law

In its first full year the law:	It's being administered:	
Hasn't changed plant labor relations	In a fair and proper way by NLRB	74%
Has eased plant labor relations 24	Unfairly, or not as Congress intended	
Has made labor problems tougher 3	No opinion	18
The law:	It could be improved by adding:	
Should be kept, but amended 50	Compulsory arbitration	75
Should stay as it is	A ban on industry-wide strikes	
Should be repealed	An industry-wide bargaining ban	
No opinion 7		

OW DOES MANAGEMENT FEEL about the Taft-Hartley law, now that it has been in effect for a full year?

Have plant labor relations been easier,

or more troublesome, under the law? What changes, if any, do practical labor relations men consider necessary to make the T-H law work better?

• The Answers-Business Week sought answers to those important current questions in a poll of 528 labor relations directors last week. The group selected represents a cross-section of manufacturing industries located in 15 cities and 13 industrial states. Their companies employ 433,465 workers-twothirds of them members of unions.

Business Week found that:

(1) By and large, the men who handle industrial labor relations like the T-H law, although half think it needs some changes.

(2) They believe the law is being ad-

ministered fairly.

(3) It hasn't had much effect on most

plant labor relations so far.
(4) Three out of four labor relations men polled would like to see the T-H law bolstered by compulsory arbitration of national emergency disputes that outlive T-H mediation and fact-finding.

(5) The same percentage-but not the same group-favors a ban on industry-wide strikes that threaten the na-

tional economy.

(6) And about half of those polled would like to see industry-wide bargaining barred under federal labor laws.

• The Significance-Answers given by the sampling can be regarded as a fair measure of what management generally

thinks of the T-H law.

Management won a 12-year fight for labor-law recognition when Congress adopted the Labor Management Relations (Taft-Hartley) Act of 1947. Under it, the boss got new rights and responsibilities; unions lost a few of the

privileges they had gained through the old Wagner act (BW-Jun.28'47,p15). • Bided Time-The law went into effect on Aug. 22, 1947. Management had some forebodings then about what might happen to established labor relations. Most employers were cautious. Almost all thought the T-H law eventually would prove to be a good law. But there was a strong element of experiment in the law's intent to regulate activities of unions. So management men bided their time before taking a critical look at the operation of the new law; they agreed that labor and management would have to live together under T-H for at least a year before a sound evaluation of the law could be made.

The first anniversary of the effective date of the labor law falls this weekend. However, most bosses made up their minds long ago on the T-H law.

• What About the Law Itself?-Business Week's opinion researchers found that only seven of the 528 labor relations men interviewed are wholly dissatisfied with the T-H law. That number -less than 1%-would like to see the T-H law repealed. Of the others, 222 (42%) believe the law should stay on the books just as it is; 263 (50%) think it should be amended. Another 36 said they hadn't decided yet.

Labor relations heads of 125 companies (24%) credit the T-H law with making life easier for them. In 14 companies (3%), labor relations have become tougher since the law went into effect. And, significantly, the law hasn't made any appreciable difference in the labor relations of 388 companies (73%). • What About NLRB?-The majority

of the men in charge of plant labor relations believe the law is being administered in "a fair and proper way" by the National Labor Relations Board. (A common management complaint during the Wagner act era was that NLRB was partial to unions.)

Only 42 (8%) of those interviewed said that they don't like the way the NLRB is now operating. More than half of these were speaking of their experiences in plants employing 250 or less.

· What Changes, If Any?-Only half of those interviewed said they thought the T-H law should be amended. But more than that percentage favored one or more of a number of additions to the law which have been proposed:

Compulsory arbitration of national emergency disputes, if mediation and fact-finding fail, is favored by 398 of those polled (75%). This proposal got heavier support from labor relations men in small companies than in the bigger ones (it's the bigger companies that are more likely to be caught up in compulsory arbitration).

An industry-wide strike ban is favored by 396 labor relations men (75%). Big and little companies regard this proposal in about the same way.

An industry-wide bargaining ban is favored by 278 (53%) of the group polled. Again, sentiment of the small and large companies was just about the

• The Craft-Union Problem-The vote split about even between "yes" and "no" on the currently important question: Should craft unions have the right to petition for representation as a separate bargaining unit in plants where an industrial union now has sole bargaining

Of those polled, 204 (39%) voted ave, while 212 (40%) answered no. (Others expressed no opinion on this one.) The significance was in the breakdown of the vote. This showed: Craft union bargaining units are favored by 42% of all the companies polled with 250 or fewer employees; they are opposed by 45% of all the big companies that employ more than 250.

· Affidavits and Notices-The T-H requirement that union officers must sign

non-Communist affidavits was endorsed by 448 respondents (85% of the sampling). Only 46 labor relations directors (9%) said the affidavits shouldn't be

And 436 (83%) agreed with the T-H rule that both employers and unions must file notices when a labor dispute

• Behind the Statistics-Actually, experience under the T-H law is something that can't be expressed entirely in statistics. So the labor-relations bosses were asked a direct question: Why do you think the T-H law has eased labor relations in your plant? Or: Why do you think the law has made them more troublesome?

The answers were classified and tabulated. Here's what the 125 who reported better labor relations said were the

(1) The law has made labor-management negotiations easier and has brought about greater harmony and cooperation (43 answers, 34% of the 125 respondents).

(2) The law has made labor and its leaders more reasonable, more responsible, and less aggressive (37, or 30%).

(3) The law has balanced the bargaining power and the rights of unions and management (16, or 13%).

(4) It has helped management find its rights, and has put management in a stronger bargaining position (16, or

(5) Management, no longer muzzled, can speak its grievances, and talk more frankly to workers (12, or 10%

(6) Labor now recognizes the existence of certain rules which govern it, and by which it has to abide (12, or

(7) Business is running smoothly since the law prevents strikes, or shortens their duration (10, or 8%).

(8) The law eliminates the power which labor held under the now illegal closed-shop contract (5, or 4%).

(9) It sets up specific machinery for solving disputes, so that both management and labor know where they stand (5, or 4%).

(10) The law has helped drive leftwing unions or union members from the plant (3, or 2%).

In the above listing, the number of mentions exceeds the number for whom labor relations were eased because more than one comment was made by some of those polled.

• Dissents-What about the 14 labor relations men (eight of them in companies employing more than 250 persons) who reported the T-H law toughened labor problems? Here are some reasons:

"Men refuse to sign a contract in conformity with the new law. They insist on a closed-shop clause.'

"The union suspects that management wants to weaken organized labor by throwing obstacles in the path of union-shop agreements."

"The law is not generally accepted,

and therefore causes trouble. The law is always being referred to by the union and a great deal of dis-cussion has resulted." And a similar comment: "More time has to be spent with the unions now, more conferences, taking up union dues, etc." And still another: "Ignorance of the provisions of the law [has] made labor relations more troublesome.'

"Men try to get around the various provisions of the law-the closed-shop

clause, for example."

"[Our] Communist-dominated union

resents and defies the law.'

And finally: "The effect of the T-H law has been overrated. It hasn't helped management as much as it was advertised, nor has it hurt labor. Doing business with a left-wing union, we had a hard time fighting off attempts by the local to get us to agree on clauses which would circumvent the law. This year's negotiations were the hardest we ever

### Alaskan Pioneer

New company, backed by Puget Sound Pulp & Timber and American Viscose, gets virgin timber tract in Tongass forest.

Nowadays, when somebody "Timber!" a lot of people in the pulp-wood industry are likely to jump. But last fall, when the U. S. Forest Service did the yelling, nothing happened. The timber the service wanted to sell was in the wilderness of southeastern Alaska, in the Tongass National Forest (BW-

Sep.6'47,p18).

• Buyer No. 1-Now after several false starts, the Forest Service has a taker. Ketchikan Pulp & Paper Co. has signed a 50-year contract to buy 1.5-billion cu. ft. of Tongass pulp timber, and set up a pulp mill that will cost between \$20-million and \$30-million. It has plunked down \$100,000 to prove it means business

Back of Ketchikan are Puget Sound Pulp & Timber Co., of Bellingham, Wash., and American Viscose Corp., big consumer of high alpha pulp.

American Viscose's role in the deal should be a clew to where most of the wood will go-into synthetic fibers, most likely, not paper or newsprint.

• Terms-Ketchikan is paying 85¢ per 100 cu. ft. for timber cut up to 1962 for pulp use; it will pay more for timber cut for veneer or saw logs. Present plans call for a power plant and pulp mill with a daily output of 300 tons.

Some paper makers, like Crown Zellerbach Corp., took a look at what Alaska had and apparently passed it up as too costly for their kind of operation. Ketchikan thinks it can swing the project. Here's why:
• Advantages—Once the Ketchikan op-

eration gets going, it will be comparatively cheap. Engineers estimate that pulpwood can be delivered to the proposed mill at a cost of about \$12-\$13 per 100 cu. ft., compared with current costs of \$18-\$19 per 100 cu. ft. in the U. S. Northwest.

Another advantage: The heavy rainfall in the Tongass makes fast-growing timber. By the time the 50-year contract has run its course, there'll be a

whole new pulpwood crop.

• Alaska's Gain-For Alaska, the deal is big news. It promises to give the territory what it has always wanted-a yearround industry. The new plant will need 600 men at the outset, maybe a lot more later.

 A Starter?—Now Ketchikan has taken the plunge, it may spur other groups to go into Alaska. The new Alaska Industrial Corp. is exploring the possibilities of the Sitka area.

### WHO WAS POLLED

What Business Week's poll of 528 labor relations directors reveals is an indication of what management as a whole thinks about the Taft-Hartley law. Here's why:

• The 528 people interviewed are the top men in charge of labor relations in their plantspersonnel managers, labor relations directors, vice-presidents in charge of labor, and, in a few instances, company presi-

• Their plants (250 of them employing 250 or fewer persons, 278 employing more than 250) are located in 15 cities in 13 important industrial states. Their geographic location was chosen according to the distribution of manufacturing industry in the United States.

• The industries represented are metal working (36%), chemical processing (17%), food processing (15%), metal producing (6%), lumber (5%), textile (4%), and other manufacturing (17%).

· More than two-thirds of the 433,465 workers in the plants are union members A.F.L., 35% C.I.O.).

A scientific opinion-research method was used.



### Colorado Cement Plant Swings into Production

Construction materials shortages should get a lift from the output of this new cement mill in Portland, Colo. Ideal Cement Co., owner of the plant, expects to produce

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1,000 bags of cement per hour. A streamlined production setup features a mile-long conveyor that hauls lime and shale from a quarry to the plant.

### "Ghost" War Orders Coming

Government wants to avoid snafus of last war, get industry geared to handle military requirements smoothly. So dry runs will begin in October. Machine tools are first on the list.

During World War II, industry got its war production orders on a trial-and-error basis almost up to V-J Day. Next time, if an emergency comes, the government wants to do things differently. It is planning to make dry runs of wartime orders.

• Paper Orders—Sometime in October, a batch of "ghost orders" will be put in front of the first guinea pig—the machine-tool industry. The orders will have to be filled—but only on paper.

The National Security Resources Board, working with the Munitions Board, is making up the bills of requirements. Major industries will be asked for as exact an amount of goods as they probably would have to supply in wartime. NSRB now has an estimate, kept tight under wraps, of the amount of machine tools that will be needed during the first phase of a war. Each company's contribution will be based on its productive capacity. For instance, if a manufacturer now makes 30% of the nation's machine tools, he is likely to get a ghost order for around 30% of wartime needs.

• Key Industries—If the first try works - and NSRB is sure it will-communi-

cations equipment and electronics industries will be next. Industrial equipment and the automotive people are high on the list. By the time NSRB is through, it will have covered every essential industry in the country.

Exact details for procedure aren't clear yet. But a plant that gets a phantom order will work on it—paperwise—just as though it had flesh and blood. The company will figure out where to get materials, estimate the payroll, size up the retooling job that would have to be done, line up subcontractors.

• Problems—Maybe a plant will find—just as in real life—that• its order is impracticable. Then there will be conferences to thrash things out. Instead of going direct to the board with any problems, though, a manufacturer can go to his own industry association. NSRB plans to work closely with such associations, keep them posted on all the details of the plan.

Industries that were bottlenecks in the last war are getting a thorough going over. Crack investigators are tracking down other weak spots in the industrial chain. They'll try to learn, for example, whether the shortage of fractional horsepower motors that hampered production last time is likely to turn up again.

The plan doesn't include new plants, yet. NSRB wants to cover only existing capacity in the first set of requisitions. As new plants are built, orders will be framed to cover them.

• Special Cases—In some industries, even "ghost orders" will be tough to frame. Revisions will have to be made from time to time to cover new developments. Take petroleum, for example. In this critical industry the government obviously can't order more petroleum than can be pumped out of the ground. But supposing that isn't deemed enough?

New production will have to be stimulated. Already the National Petroleum Council is working up an estimate of the nation's probable wartime oil needs, and ways to boost production. Between NPC and NSRB there will have to be lots of planning, revising, figuring. Both will be dealing with constantly shifting supplies and demands. It's literally a problem in calculus

• Real Thing—If shooting ever actually starts, there'll be a second set of orders. These will be based on "expansion ability" and more realistic estimates of what it will take to run a war. New companies will get a chance on these. And the small businessman is promised his share.

• Legislation Necessary—The phantomorder setup assumes that Congress will give the Administration broad powers to cover every bit of the economy in wartime. As a matter of fact, NSRB already has a first draft of a voluminous bill that would regiment the entire nation. It would permit the government to (1) requisition plants, facilities, production, and raw materials; (2) allocate materials; (3) draft civilian manpower; (4) regulate wages, prices, and profits; (5) control imports and exports.

If NSRB Chairman Arthur M, Hill O.K.'s this bill, it will go to the President. He may ask Congress to pass it on a standby basis—or he may hold it until an emergency actually requires legislation.

• Ready to Go—The biggest drawback to the "ghost order" plan, of course, is that nobody knows for sure (1) when and if a war will come, and (2) just what our needs will be at that particular time.

But at least industry will have practiced up on its early pencil-work. It will have reestablished some liaison with sub-suppliers, got its bookkeeping machinery into shape. For its part, the government will have had a workout in the mammoth task of dovetailing requirements—fitting men and machines to the demands of war.

### Stop the Money

FCC thinks many radio "give-away" programs are lotteries, proposes to put a halt to them. Fight looms.

The radio industry this week is trying to find an answer to this \$64 question: Will the Federal Communications Commission be able to chase a batch of the prolific "give-away" programs off the air?

• More and More Money—In the past couple of years, the contest vogue has had a steady resurge. Time and talent costs being what they are, many a radioman figures it's cheaper to bribe the audience into listening than sink a fortune into a musical or dramatic flop.

But now the awarding of Cadillacs for the right answer to who discovered America seems to have started a countertrend. On the other side of the fence

RADIO ACTORS AND WRITERS who feel that their jobs are in danger.

NETWORKS AND SPONSORS who have to buck the hot give-aways.

OTHER FORMS OF ENTERTAINMENT
—movies, dance halls, etc.—that feel
the effects of the free money.

• Lottery?—From somewhere in these groups, a squawk went up to the FCC. Result: The FCC has taken a good look at the lottery provision in the communications act of 1934; on the basis of it, it wants to outlaw programs which:

 Require the winner to furnish money or thing of value, or to have any product advertised by the radio station.

(2) Require the winner to be listening to the program or watching it on television.

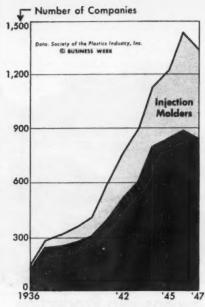
(3) Require the winner to have heard the correct answer—or a hint at it—via the same, or a previous, broadcast.

(4) Require the winner to answer the phone or write a letter, if the conversation or letter is to be broadcast.

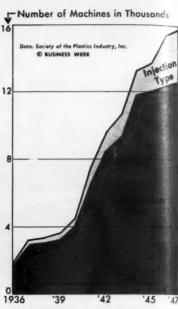
• Networks—The FCC is giving interested parties until Sept. 10 to file views on its proposed ruling.

This isn't FCC's first poke at freemoney programing. Back in 1940 it asked the Dept. of Justice to take action against "Pot o' Gold" and half a dozen other programs. Justice never preferred charges. But the FCC did get some satisfaction out of it—the radio industry got a big scare, quickly began revamping the shows FCC objected to.

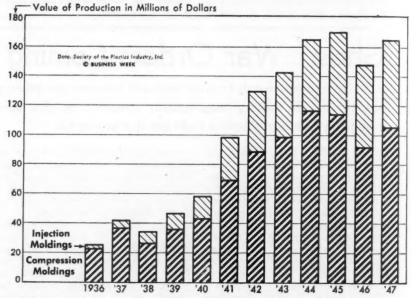
• Will They Scare?—What will happen this time is probably again contingent on (1) how quick the industry scares, and (2) whether FCC can convince a court that it hasn't got too much stretch in its definition of a lottery.



(1) Fewer plastics molding companies...



(2) With more machines in their plants...



(3) Bring value of plastics output back almost to wartime high

### Plastics Picture Looks Brighter

To the plastics industry, getting ready for its biennial exposition to be held in New York beginning Sept. 27, business looked good last week. After a postwar dip, dollar volume was back almost to its wartime high.

These charts show what has been happening in molding—an important phase of the plastics industry. In injection molding, a heat-softened plastic material is forced into a closed mold. In compression molding, plastic material is put into a heated mold, and

the mold then is closed around it. In the top left chart, the total of companies includes a small percentage of duplication: Some do both injection and compression molding.

In the lower chart, part of the molders' rally in dollar-volume can be attributed to higher prices. But, even so, the 1947 gain indicates that the postwar dip taught the industry a lesson: See to it that plastics are used where they're suitable, in products that will satisfy consumers.

### What Consumers Did with 1947 Incomes

How each group divided its income and expenditures:

	Percen	t of Disposable Inc	ome Used for	
Income Group	Net Saving	Expenditures on Automobiles and Selected Durable Goods	Expenditures on Other Consumer Goods	Total
Under \$2,000	-8%*	7%	101%	100%
\$2,000-\$2,999	3	9	88	100
\$3,000-\$4,999	7	9	84	100
\$5,000 and over	26	9	65	100
All income groups	10	9	81	100

### How Income Groups Fit into Economic Picture

How total income and expenditures were divided among income groups:

	·		Percent o	·	
Income Group	All Spending Units	Total Disposable Income	Total Net Saving	Total Expenditures on Automobiles and Selected Durable Goods	Total Expenditures on Other Consumer Goods
Under \$2,000	40%	16%	—12% <sup>*</sup>	12%	19%
\$2,000-\$2,999	25	20	8	23	21
\$3,000-\$4,999	25	32	25 -	35	33
\$5,000 and over	10	32	79	30	27
All income groups	100	100	100	100	100

<sup>\*</sup>Spending units with incomes under \$2,000 drew on savings or went into debt, so that their total spending exceeded their total income by 8%. This excess of spending over income was equal to 12% of total net saving of all spending units.

### Consumers Still Very Flush

Federal Reserve Board shows that in 1947 two-thirds of spending units were able to save \$25-billion. One-quarter "dissaved" \$11-billion. Durable goods got 9% of the expenditures.

Believe it or not, about two-thirds of all consumers still managed to save something last year—even at 1947 prices and taxes. All told, they squirreled away \$25-billion.

• On the Cuff-Meantime, about one family in four lived above its income. It dipped either into savings or credit to satisfy its wants. This excess of spending-or "dissaving"—came to about \$11-billion. Yet that wasn't alarming. Most consumers who went into debt weren't hard pressed. They saw what they wanted; they had some cash—plus the ability to go into hock—to get it; so they did.

These are the highlights of the fourth installment of the Federal Reserve Board's Survey of Consumer Finances. Previous reports in this series (BW-Jul.17'48,p26, Jun.19'48,p21, Jun.5'48,p23) covered consumer buying plans, distribution of incomes, and holdings of various assets. This section—out this week—gets into savings and the allocation of disposable incomes.

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• In the Bank—According to the survey, 31-million spending units out of a total of 48.4-million saved something out of their incomes during 1947. (The

survey defines a spending unit as all the members of a family living under the same roof and sharing their incomes for major expenses.) About 13.5-million, or 28%, reduced their assets or upped their debts. And some 4-million, or 8%, came out just about even.

Net saving (the difference between all savings and all "dissavings") was smaller last year than it was in 1946. Net saving in 1947 ran about 9% of consumers money income before taxes. In 1946, it was 12%.

• Prices vs. Savings—Rising prices and the general pressure on consumer incomes undoubtedly had a lot to do with the drop in saving last year. But Federal Reserve experts think that most of the dissavers were not worrying about the wolf at the door. Almost three-fifths of the dissavers bought automobiles, furniture, radios, or household appliances during 1947. And 5% of all spending units took out mortgages in connection with the purchase of real estate. In most cases, it was these heavy outlays that put the consumers in the minus column.

• In the Middle—The experts are more concerned about the 4-million spending

units that broke even on the year. Many of these families probably were hard up. They could not dissave because they had no liquid assets to draw on, and no credit standing to qualify them for loans.

To see which income groups did the saving and the spending in 1947, take a look at the accompanying two tables concerning the distribution of disposable income (money income minus federal taxes).

• At the Top—The biggest savings, of course, are in the \$5,000-and-over group. It got 32% of the disposable income in 1947. And it accounted for 79% of net savings. It also provided 30% of the buying power that went into automobiles and other durable goods (furniture, radios, refrigerators, ranges, washers, other appliances). It accounted for 27% of the expenditures on all other consumer goods.

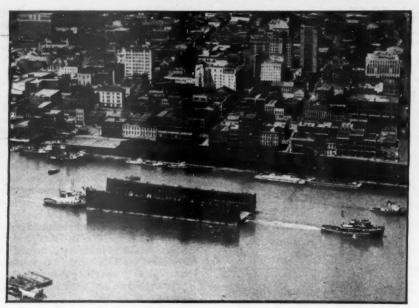
At the other end of the scale, consumers with incomes under \$2,000 after taxes had 16% of total disposable income. And this is where the dissaving comes in.

• At the Bottom—This bottom income group increased its spending power 8% by borrowing or falling back on accumulated savings. It spent an amount equal to 7% of its current income on automobiles and durables and 101% on other consumer goods. Altogether, it accounted for 12% of the total expenditures on durables and 19% of the other expenditures.

The relation between dissaving and the purchase of durable goods shows up plainly in the survey. A good 56% of the consumers who drew down their savings bought automobiles or other durable goods during 1947. This compares with only 38% among those who saved part of their incomes and a bare 15% among the zero savers—those who broke even.

Drawing on liquid assets was the commonest form of dissaving in 1947. About one-third of all spending units reported that they reduced their liquid hoards during the year. About one-fifth of all spending units increased their consumer debt. Not all these were dissavers on balance, of course. Some added to other forms of saving (life insurance, for instance).

• Moral—There is a moral in this, not only for economists but also for any manufacturer who is shooting for a mass market. Any time the number of dissavers shrinks and the number of zero savers starts to rise, watch out for trouble. There are no signs at present that the dissavers are getting in too deep. But if they do, they probably will switch to the buying habits of those who now have to make their incomes come out even. And if that happens, a sizable slice will come off the demand for durable goods of all sorts.



8,500-TON DRYDOCK arrives at Mobile, Ala., a symbol of challenge to the North . . .

### South's Port Trade Booms

Eight northern ports band together to fight "stealing" of trade by southern ports, which have better facilities, lower freight rates. But the northerners can't do too much about it right away.

The southern seaports of the U. S. are "stealing" a big chunk of the export trade. That's the charge being made these days by a group of worried North Atlantic ports. With the Economic Cooperation Administration about to hit its stride, they are deeply concerned about getting their share of the shipping.

• Tables Turned—Oddly enough, the "theft" charge is based on the complaint that the South is getting more of a break than it deserves on rail freight rates. In the past, it has always been the South which has shouted for freight rates to be adjusted so that it could compete with the North. Now the tables are turned—at least as far as seaports are concerned—because it costs U. S. businessmen less to ship freight to southern than to northeastern ports.

Last week a group of eight northern ports joined forces to get back some of the trade. The eight are Philadelphia, New York, Portland, Me., Camden, N. J., Wilmington, Baltimore, Boston, and Hampton Roads, Va. (which includes Norfolk and Newport News). After a closed meeting, representatives of these ports said that the freight-rate differential was "partially" to blame for their shipping loss.

• Better Ports—But the reason for the South's advantage goes a lot deeper than freight rates. The simple fact is that it has better ports than the North. It

has got them within the past few years through heavy spending and building.

Leader in the drive has been New Orleans (BW-Jun.28'+7,p38). In four years, this city has bolstered its port to an extent that would normally take 25 years. It built a \$1-million, 10-story International House, providing conference rooms and private dining rooms for Latin-American visitors. Another \$1.5-million went into the International Trade Mart, designed to display Latin goods for U. S. buyers, U. S. goods for the Latins.

• \$75-Million Plant—All told, the New Orleans Board of Port Commissioners has built a plant worth some \$75-million. It includes seven miles of modern, quay-type wharves and steel transit sheds, a 2,600,000-bu. public grain elevator, a 500,000-bale public cotton warehouse. The board has also spent \$23-million to build an inner-harbor navigation canal, thus providing waterfront sites for many industrial plants.

New Orleans-like most southern ports-has another advantage over the North. Free storage time for cargoes on the docks seldom exceeds 10 days in the North. In New Orleans, the time ranges up to 60 days before demurrage has to be paid.

Also, freight handling is cheaper at New Orleans. For example: From January, 1945, through May, 1946, the average cost per measurement ton (40 cu. ft.) for handling general cargo at the port of New Orleans ran \$1.05. The cost at New York averaged \$1.74. at Philadelphia, \$1.59; at Baltimore, \$1.50.

• Freight Rates—On top of all this there is the rail freight-rate differential.

The rate relationships were set up about 30 years ago, based on what the southern ports then had to offer. In 1936, the Interstate Commerce Commission looked into the situation with an eye to correcting the rates. It found that lower railroad charges to Gulf ports were based on less-frequent and irregular sailings, greater steamship distances to world ports, smaller ships serving the area, higher marine insurance rates.

New Orleans has overcome most of these handicaps; so have other Gulf ports. But some are still a long way behind. Thus, ICC holds back from overhauling rates, on the ground that it would prove an actual hardship to some of the ports.

In fact, last spring ICC gave the South an additional freight-rate advantage. On May 6, it boosted Chicago-to-New York freight rates 30%, while the Chicago-to-New Orleans rate rose only 25%. As a result, Chicago manufacturers can ship iron and steel to New Orleans for export at 51¢ per cwt., as against 57¢ to New York. And Chicago buyers can bring imported coffee from New Orleans by rail for 61¢ per cwt., compared with 69¢ from New York.

• "Propaganda"—The eight North Atlantic ports most vitally concerned say that New Orleans has used unfair propaganda in promoting these virtues. Said a spokesman for the northerners:

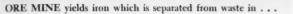
"New Orleans is trying to sell the nation's shippers the idea that everything originating between Pittsburgh and Denver and north to the Canadian border should be shipped through the port of New Orleans. That's strictly a lot of propaganda. And we're going to lick them at their own game—selling our own product to the public."

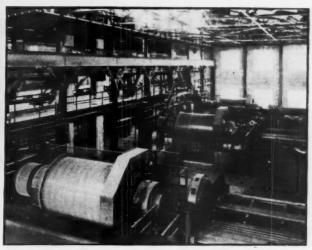
• Little to Sell—A drawback to counterpropaganda is that many ports in the North aren't up to date. Alongside New Orleans' refurbishing job, the harbor and docking facilities of the North look pretty bad. And there has been no real drive to get modern equipment.

Philadelphia provides an example of a general lack of progress in northern ports. Several of the municipal piers can't be used by freighters because the slips shoal and are never dredged out. That means that the lessee faces an expense of from \$10,000 to \$20,000 a year to dredge around his pier.

• Immediate Weapon—The northern ports know that they can't rebuild their ports overnight. Thus their only immediate practical weapon is to get freight rates adjusted. They figure that if they can, they will get back at least some of their lost business.







CONCENTRATING PLANT. It's a return to old ground as . . .

### Steel Industry Has New Interest in Adirondack Iron

Iron-ore digging in the Adirondacks antedates discovery of the Mesabi range by a full century. Now it's getting new attention from the steel industry.

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• Old Timers—The iron mines in upper New York State are among the oldest in the country. The first mines were opened almost 150 years ago. Benedict Arnold in his Regimental Book tells of sending men to Port Henry to dig iron ore in 1775. But the Adirondack workings fell from importance for two reasons: (1) The ore was used in iron-making before iron castings were replaced generally in the metalworking industries by steel castings; (2) discovery of the Mesabi range provided a handier source of raw material for the fast-growing steel industry.

The Adirondack deposits were forgotten for decades while the Lake Superior region offered an easy-to-get-at supply of high-grade ore. Now that the seemingly inexhaustible beds of rich ore show signs of exhaustion (BW-Apr. 19'47,p20), other regions are beginning to look good too.

• Steel Moves In-Republic Steel Corp. moved into the Adirondack region 10 years ago.

It leased the old Witherbee-Sherman Co. properties near Port Henry for 25 years in 1937. During the current year, it is expected that 2-million gross tons of crude ore will be mined and that a million tons of finished product will be shipped.

One year later, Republic leased the Lyon Mountain mine of the Chateaugay Ore & Iron Co., and later bought it. In 1947, production was 375,000 tons of finished product.

Last week Republic let it be known that it was widening its interest in New York State ore. It revealed that an extensive program of diamond drilling is being carried on in a 10-square-mile area northeast of Antwerp, N. Y., straddling the St. Lawrence County-Jefferson County line. Two old mines—the Caledonia and the Old Sterling—are included in the area. The Caledonia mine was last worked in 1907. Old Sterling also was last operated during the first decade of the 1900's.

• Expanded Output—Other steel companies are operating in the Adirondacks, too. Jones & Laughlin Steel Co. and M. A. Hanna Co. have mining operations under way in southern St. Lawrence County. Hanna owns the Clifton mine, which is said to have an annual capacity of 300,000 tons of direct shipping ore. J. & L. has the Benson mine, with an annual capacity of 2-million tons of concentrates.

Growing importance of the Adirondack district is indicated by the expanded output there. In 1935, the Adirondack district produced less than 300,000 long tons of crude ore. Seven years later the output had jumped to more than 3-million long tons of crude

In the 10-year period, 1918-1928, the Adirondack district produced only 0.6% of total iron ore mined in the U.S. But in 1947 the district accounted for 3.1% of the total.

• Iron Content—The iron content of Adirondack ores varies from the almost pure magnetite found in some mines there down to the 22% to 25% iron content which is currently the lower limit for profitable handling.

Richest of the ore from Republic mines is taken from the Old Bed deposit at Port Henry. Approximately 20% of that production can be separated from the total mine output into lump ore that will contain 61% iron. This is of equal or better quality than

the fast-decreasing lump ore of the Lake Superior region.

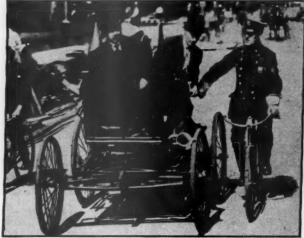
• Processing—Most of the ore is processed before being shipped away to the blast furnaces. The ores requiring beneficiation are first put through concentrators which separate iron from the unusable material. This is done by a relatively simple magnetic operation. The ore is carried on an endless belt which has a magnet behind it. The magnet holds the magnetic ore on the rubber-covered belt while the waste material falls off.

The ore concentrate, too fine for use in blast furnaces, is then put through a sintering plant. In the sintering process the concentrates are mixed with crushed anthracite coal and a small amount of water. The mixture passes over an ignition furnace which causes the coal to burn and puts the concentrate in bulky form ready for shipment.

• Extent Unknown—No one knows the extent of the ore reserve in the Adiron-dack region. Republic reports that there are approximately 12,000 square miles of iron-bearing territory in northern New York. Many estimates have been made as to the total reserves in the district. In 1935, for example, they were estimated as high as 600-million tons of magnetite ore and 2-billion tons of titaniferous ore (containing titanium).

• Guesses Only—D. B. Gillies, Republic mining consultant, has this to say about reserves: "No estimate can be more than a guess, however, due to the geological formation of the territory and to the fact that modern scientific exploration has been made in only a portion of the region. Exploration on our own properties has clearly proved that ample ore exists, of a type highly desirable to carry Republic through the period of its leases."

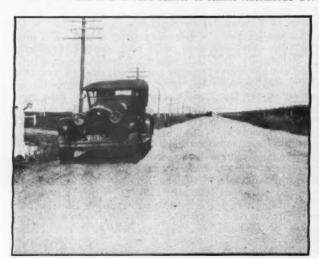
### AUTOMOTIVE



1895 Cop chases vehicle off Chicago's Michigan Avenue.
Driver is Elwood Haines of Haines Automobile Co.



1905 Cars that dared the country roads found the going tough. In those times, the jeer "git a hoss," had point



1926 Better roads, like this stretch of the Lincoln Highway, Neb., meant better business for the auto makers



1948 Crowded highways, like Long Island's Grand Central Parkway, prove the auto has come a long way

### The First 100-Million Cars Were the Hardest

That's how it looks now, after more than 50 years of output. Problem is to meet demand—and 1948's 5-million cars won't do it.

Last week, in some one of the 113 car, truck, and bus assembly plants (chart, page 34), the 100-millionth motor vehicle built in the United States came down the line and started on its way to a consumer. No. 100,000,000 was built 52 years from the time the auto industry agrees was its real starting point, 1896. In actual count, it is 56 years since the building of the first car.

The industry marked its milestone quietly last week (more formal celebrations are scheduled for this fall). To auto men, the primary question is: "Where do we go from here?" Their

own answer is: to a sustained high level of activity, as far as they can see.

• Good Years Ahead—"As far as they can see" means, to most industry analysts, at least another year, maybe three. People are clamoring just as hard for cars and trucks—lumped together—as they were when war ended and American plants began to make autos again. There's only one shadow in the long-term sales outlook: the constant advance of prices (BW-Aug.14'48,p73). This is steadily steering prospects away from the market—but not enough, yet, to give the industry any real worry.

In fact, right now carmakers are rather glad when people take themselves out of the market. That eases some of the incessant demand for new cars. How big that demand is comes out plainly in the premium prices being paid for new "used" cars on the secondhand lots: 1949 model Fords, to cite just one example, are going for almost twice their list prices—with plenty of willing buyers.

• Goal: 5-Million Vehicles—To meet the demand, U. S. plants appear poised to build about 5-million cars and trucks this year. Output for the first seven months was about 2,981,000. Supplier strikes slowed down operations this month, but the industry doesn't expect these to cut any significant amount off





Many types still short, but over-all stocks in 13 Ryerson plants are probably the nation's largest.



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Floor Plate, etc.

SHEETS—hot & cold rolled, many types & coatings

TUBING—seamless & welded, mechanical &

STAINLESS-Alleghony metal sheets, plates,

bars, tubes, pipe, etc.
REINFORCING—bars & accessories, wire

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Added Ryerson service includes a chart to guide heat treating sent with alloy shipments.

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- Cleveland Pittsburgh Buffalo Chicago Milwaukee St. Louis Los Angeles San Francisco

# 47 FINGERS Check the Pulse of New York State Business

At your service is the knowledge and experience of Marine Midland bank officers in 47 New York State communities. They can help you spot many a business opportunity—give you accurate facts and figures on local conditions. When you need such help, call on us in New York City. We'll be glad to help you cover the "World's Richest Market."

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Lamestown Johnson City Lackawanna Lockport Malone Medina Middleport Niagara Falls North Tonawanda Nyack Oswego Palmyra Phoenix Rochester Snyder Sodus Tonawanda Troy Watertown Watkins Glen Webster Westfield Williamsville



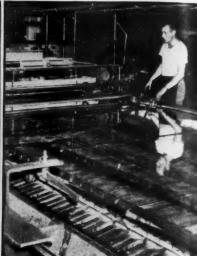
Wilson

the year's totals; volume loss now can be made up later.

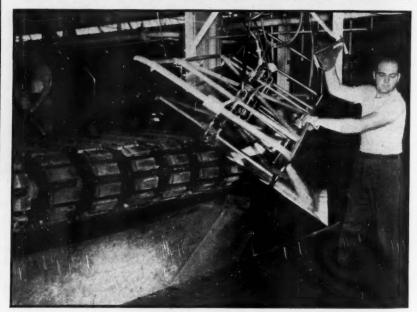
The present operating rate—averaging more than 400,000 a month—is producing substantial profits for the auto companies. All are in high profit ground; some are at near-record levels.

• Independents Up—By and large, independent companies are doing a lot better, relatively speaking, than the Big Three multidivision manufacturers. Sales tabulated thus far show that the independents are getting a much begger slice of the business than they had in the immediate prewar years (chart, page 33). In the late thirties, the independents called it a good year when they did 12% to 15% of the total U.S. car and truck business. So far this year, they have built more than 20% of



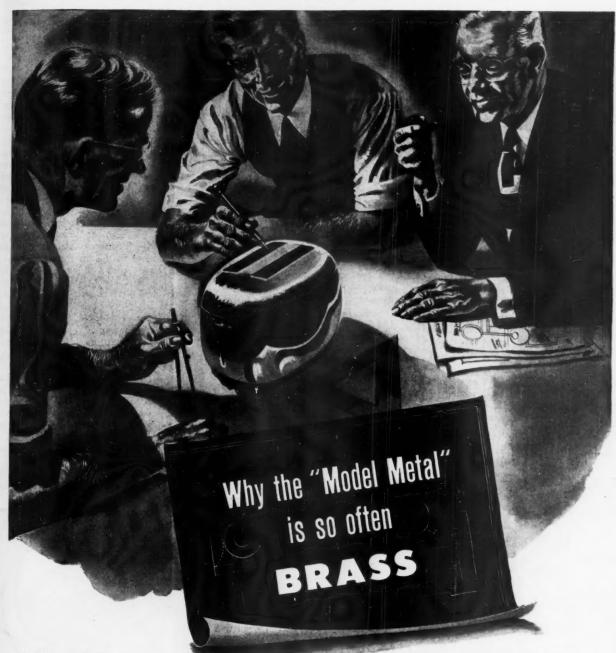


### Sand Found Under Ford Plant Becomes Glass.



### That's Hoisted off Conveyor by Suction

Ford Motor Co.'s glass works in St. Paul, Minn., is located about as near to a source of supply as a plant can be: It's right over a vein of silica sand, the main raw material for glass. When Ford discovered the vein, it had an assembly plant on the spot. So it promptly located a glass operation there. The plant turns out about 8,000 ft. of 104 in.-wide safety glass a day-or about 30% of Ford's needs. Two men working with shovels and other equipment send enough sand along in a 40-hour week to keep the plant busy around the clock, seven days a week.



WHEN a new product is in the design stage, chances are that the first scale models will be built of Brass. And why? The answer, in one word: WORKABILITY.

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No other metal can approach Brass in this all-important quality. Turn it, spin it, draw it...no matter how you work it, Brass behaves beautifully. In fact, Brass co-operates so remarkably well with its fabricators that intricate parts can often be formed in one operation... where any other metal would need several. And Brass pays off the same way, from model to finished product.

The modern mills here at Bristol have banked nearly a century of experience in translating this and other advantages of Brass into terms of more different kinds of products than could be listed in all the pages of this magazine. And we are better staffed and equipped now than ever before to translate the advantages of Bristol Brass sheet, rod, and wire into new profits for your new products. Simply write the Sales Engineering Director and say when you want to talk it over.

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It's really simple. Just use "the steels that do more"—U·S·S Cor-Ten or U·S·S Man-Ten-in place of carbon steel. And your steel supply will go one-third farther.

By taking advantage of the higher physical properties of these highstrength steels, you can use thinner sections to produce units that weigh one-fourth less . . . that are substantially stronger and more durable . . . that require one-fourth less steel per unit. As a result, in many cases, you can produce as much as one-third more units from every ton of steel

Since both U·S·S Cor-Ten and U·S·S MAN-TEN, like plain carbon steel, can be readily fabricated . since one-fourth less steel is required per unit, with consequent reduction in shipping costs . . . since fixed charges can be spread over one-third more units . . . your finished product can be built at little or no increase in cost.

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U·S·S COR-TEN and U·S·S MAN-TEN steels are stocked by our eleven warehouses located in principal cities across the country. Our other High Strength Steels, U.S.S Abrasion Re-SISTING and U.S.S MANGANESE-NICKEL-COPPER are also stocked to satisfy your various requirements.

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TWIN CITY	2545 University Ave., St. Paul (4), Minn. NEstor 7311

### UNITED STATES STEEL

the total assemblies; they did about as well last year.

This is true even though the heavyand medium-weight truck markets, where independent companies are well represented, have slowed up considerably since the first of the year. Light trucks are still doing a seller's-market business, but the rest of the commercial-vehicle field is back to normal.

• "New" Cars-How much of the in-dustry has turned out a postwar car that is truly new? Up to now the answer is, about half-all the independents, and Ford. The "new" General Motors and Chrysler cars will show up this winterand with them, the first real variations from initial postwar designs introduced by some of the independent producers.

• Gage for Economy-Milestone week meant more to the car industry than a look ahead. Auto builders took a prideful look back, too. And one thing they noted was that the state of the auto business is a good gage of the state of the national economy. Experience amply backs this viewpoint: When people buy cars and spur auto manufacturing, overall business is good; when they stop buying, business is bad.

As a matter of fact, the industry has become so huge that its leverage on the general economy is probably the greatest of any commercial enterprise. Its operations may prove that business is good or bad, but they also contribute in a big way toward creating the condition of badness or goodness.

• Reasons—The reasons are simple: The car plants by themselves employ today



### **Dutch Tilt**

Hollanders have a new angle on auto maintenance. To help repairmen get easy access to car innards, Jan J. Neuteboom of Spykenisse, the Netherlands, has devised this auto jig. Using the tilting gimmick, mechanics just slip the car between the hoops, lock it to a platform, and then roll it over with a few crank turns. The laminated metal hoops run on roller bearings. A triple-hooped variety is also available to handle heavier cars. A 1-hp. electric motor powers the larger model.

around 700,000 men and women-more than 1% of the nation's entire working This year they will produce around \$6-billion, at wholesale, in manufactured goods—again a notable share of the national total. The auto companies are the largest buyers of steel, glass, rubber, upholstery leather, mo-hair. They take up more than 15% of the nation's freight carloadings. They support some 40,000 auto dealerships; these in turn employ hundreds of thousands of men and women.

Today's automobile industry is the rich top-of-the-bottle skimmings from a motley collection of alley-shop manufacturers, promoters' dreams, pioneer experiments, and, sometimes, major enterprises that bloomed for a while, then

faded out.

ness had an obscure birth in 1892, when the Duryea brothers built their "Buggyaut" in Springfield, Mass. Their machine was the first gasoline engine vehicle made in America. It wasn't until 1900, however, that full records of output were first gathered, as a part of the

• Beginnings-The American auto busi-

Percent of Total Auto Output 100 Independents 80 Big Three '47 Word's Automotive Reports. © BUSINESS WEEK

### Independents Get Bigger Share of Auto Output

Independent auto producers are coming away with a growing slice of the total auto market. Prewar, the Big Three-General Motors, Chrysler, and Ford-accounted for about 90% of total auto production; their share was trimmed down to 78% for the first seven months of 1948.

Leading the independents is Kaiser-Frazer, currently producing over 5% of the total; Studebaker is a close runner-up.

Federal census. That year, 4,192 cars were produced; average wholesale price was \$1,168.

Even before then, in 1898, William E. Metzger had started the first independent auto dealership, in Detroit. Before then, too, five brands had been built with names that you still find on the road today-Autocar, Ford, International, Oldsmobile, and Packard.

In the first decade of this century there was a tumultuous rush into the auto industry. Most of the 1,505 kinds of cars that have been in production since then were born-and a lot of them died-in that period. But motoring was still a duster-costumed luxury; there were few intercity roads that the vehicle could successfully travel over. And the average car in 1910 cost more than \$1,500 at retail.

• Growing—The twenties were the years of growing. Roads got better, dealerships got bigger, and production soared to a dizzy peak of 5,358,420 cars and trucks in 1929. That record has stood

since then.

In today's period of inflationary prices, it is interesting that the average passenger car in 1929, a high-priced year for its time, retailed around \$800; today's average is about \$2,000. But average pay rates in auto plants in 1929 were \$32.20 for 46.8 hours' work; today they run about \$64 for 40 hours' work. The ratio of hourly pay rates to finished car prices is almost constant, then and today.

· Car Population-Today's world automotive population counts to a little more than 45-million vehicles. Close to 36-million of these are registered in the United States. In Nebraska, one passenger car is registered for each 3.5 persons; in Mississippi, the ratio is lowest for any state-1 to 9.8.

California has the heaviest car population among the states. Its registra-tions in 1947 totaled 2,697,362 cars, well ahead of the 2,227,556 of New York. California also has the highest truck total-446,452. But the heaviest truck markets lie in the more indus-

trialized eastern states,

• The Second 100-Million-Looking ahead to its second 100-million assemblies, auto men have one chief worry, a short-term one: how to meet today's demand. Judging from orders on dealers' books and those in sight, they could probably sell nearly twice the number they will build this year. They look for a land-office business for a few years at least, providing they can get the steel and other materials. After that, production depends on general business

But leaders of the industry feel one thing is a pretty sure bet: It may have taken 56 years to build the first 100million, but it won't take more than 25 years to double that total.



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If your present equipment is not giving you "tops" in heating efficiency, why not replace with Toridheet? You'll get all the heat you want . . . quiet clean heat . . . and still conserve fuel.

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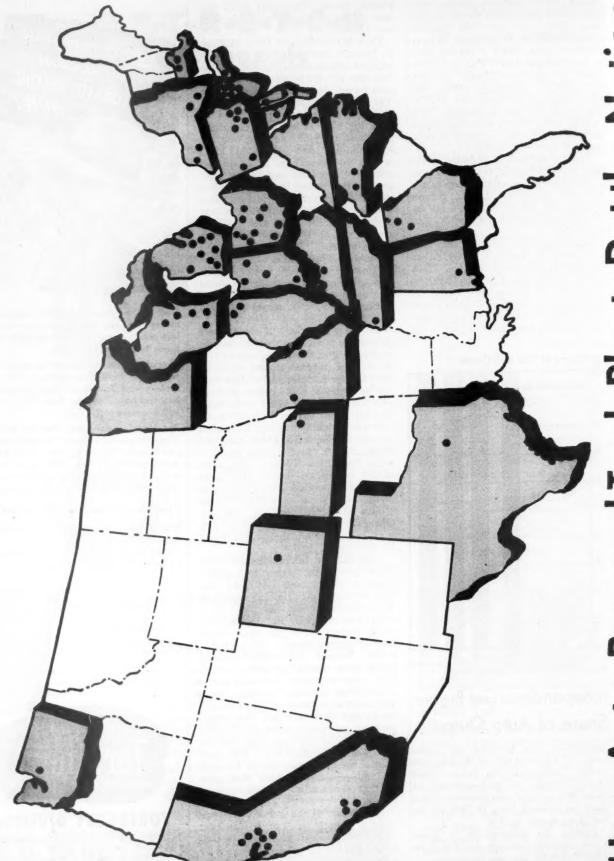
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How Auto, Bus, and Truck Plants Dot the Nation

# How Auto, Bus, and Iruck Plants Dot the Nation

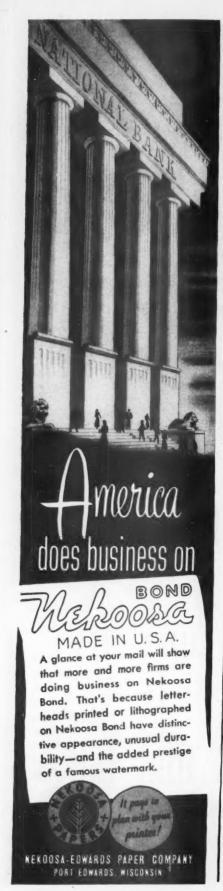
mobile Manufacturers Assn. In this map, the 24 states are in gray; dots indicate over 1-million people are making vehicles and parts today. Nearly 8-million more Motor-vehicle assembly plants span the United States. There are 113 of them making cars, trucks, and buses in 77 cities in 24 states, according to the Autothe major assembly plant localities. The assembly plants draw on more than 1,000 parts factories, plus about 20,000 other supply companies. In U. S. plants,

are selling, servicing, or doing other related jobs. Thus, more than one U. S. jobholder in every seven is in the automotive field.

So far, 1948's rate of output in assembly plants is 5% higher than 1947's,

The tabulation below shows the location, operator, and type of vehicle (autos unless otherwise indicated) of each assembly plant. when 4,797,000 vehicles were built.

Southern Coach & Body (Bas)  Festivation  Fe				ALABOT ABID			A - MON WOL		
Cover Body Substitute	ergreen	Southern Coach & Body	(Bus)	Baltimore	Chevrolet		Buffalo	Twin Coach Ford	(Truck)
Control	FORNIA - 17						Tarrylown	Chevrolet	
Michaelaer   Single-Bare   S		Crown Body	(Bus)	MASSACHUSETTS - 2			Cortland	Brockway Ward lafrance	(Truck)
Michigan		Studebaker	HINGE	Framingham	Buick-Olds-Pontiac		Ridgewood, L. J.	Walte	(Truck)
Principle   Prin	s Angeles	Buick-Olds-Pontiac (Southgate)		MICHIGAN - 27					
Primote   Prim	200	Lincoln-Mercury			ford (Dearborn)				(Truck)
Machinistic Regunds   Chryler   Ch		Plymouth			Ford (Highland Park)		Henderson	Corbin	(Truck)
Particular   Par	_	Nash-Kelvinator (El Segundo)			Chrysler		II - OHO		
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Code		MacDonald	(Truck)	Detroit	Plymouth	TI DE ST	Cleveland	White Motor	
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CONTRACT SIGNERS clinch Auto-Lite deal. Left to right, they are: D. H. Kelly, Auto-Lite executive vice-president; WAA's M. L. Godman; Auto-Lite's W. V. Flood

### Auto Parts Makers Expand

Electric Auto-Lite's purchase of huge WAA plant underscores growth of an industry that lives mainly within another. Total parts sales to makers of cars and trucks come to \$1.5-billion a year.

A car-hungry public is good business not only for the carmakers. It's bread and jam for that sprawling industry within an industry, the automotive parts suppliers. Last week, to keep up with a high-pressure demand, Electric Auto-Lite Co., giant parts maker, signed a contract (picture, above) with War Assets Administration to buy a big chunk of the former Wright Aeronautical plant at Lockland, Ohio (near Cincinnati). Quoted price: \$8.4-million. • Big Business-This big deal will add about 4.5-million sq. ft. of floor area to the firm's working space, help it take care of its customers in the originalequipment and replacement markets. And the deal also highlights the growth of the industry. Auto-Lite already has more employees (30,000) than a lot of its motor-company customers; it operates 27 plants in 20 cities. Its 1947 sales rose to \$186-million from a prewar peak of \$90-million.

Auto-Lite is just one of the companies which, coast-to-coast, rely mainly on the automotive makers for their corporate existence. Collectively, the parts suppliers' business with car- and truck-makers adds up to \$1.5-billion a year.

• Big Market—The suppliers work a thriving market. At Ford Motor Co., purchased parts account for 58% of the total cost of a car. At General Motors, the proportion may be even higher. Some other companies, less integrated,

shop outside for as much as 75% of their needs.

For the auto makers, just keeping track of suppliers is a man-sized job. One company has a printed list of the suppliers with which it does \$500,000 or more business a year. Even that list fills a 15-page booklet.

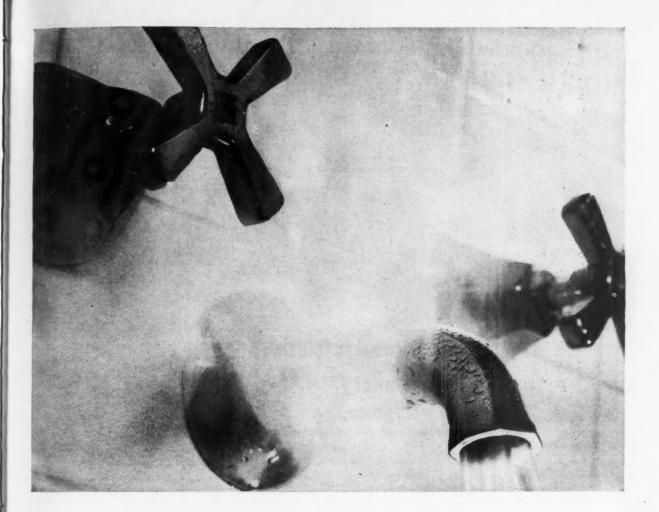
• Sprawling Plant—Automotive parts come from every state in the union. In hundreds of cities, the fatness of the industrial payroll depends a great deal on the size of orders-from makers of cars and trucks. Packard Motor Car Co., for example, buys from 1,071 suppliers located in 243 cities or towns in 25 states and Canada. Ford buys in 300 cities and 45 states.

Michigan cities probably head the list. They gain a freight advantage from being at or near the auto-making head-quarters. They also have raw materials, and plenty of labor-skilled and unskilled—on tap.

• Mass. to Tex.—But you don't have to be near Detroit to be a parts supplier.

Take Worcester, Mass., more than 500 miles from principal automotive makers: This city makes 65 parts, from spring wire to gaskets, for the auto industry. Last year, the wage bill for all workers in Worcester parts plants was about \$40-million. Those parts plants collect over \$17-million a year from the auto builders.

And Ford goes to Biltmore, N. C.,



### **Comfort on tap**

To millions of American families, water—piping hot—is a modern luxury that is taken for granted. For tub and shower, laundry and dishes, and a myriad of household chores, we turn the handle of a faucet and automatically receive a warm abundance.

To you, perhaps, Combustion Engineering is a name associated with steam generation for industrial needs—with boilers that range in size up to the height of a 12-story building and consume a carload of coal to produce a million pounds of steam in a single hour. Yet, in hundreds of thousands of homes, C-E means comfort on tap—abundant hot water from a C-E Heatmaster® or Reddyhot® Automatic Water Heater, using gas (either natural, manufactured, or bottled) or electricity as fuel.

It's a long step from a few gallons of hot water to a million pounds of steam, but a logical one for C-E, for the water heater and the million-pound boiler basically have the same function—burning fuel to transmit heat to water. And, as you would expect, the knowledge, experience and facilities that have made C-E boilers pre-eminent in industry have placed C-E water heaters high among the leaders in the domestic field.

Between the simplicity of domestic water heaters and the complexity of the world's largest boilers lie many seemingly unrelated C-E products, linked by the common purpose of generating and applying heat. All are identified by the C-E Flame . . . a mark that symbolizes Combustion's 60 years of specialized experience in the efficient use of heat.



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### How an ADJUSTABLE wrapping machine can save you money

If your product is packaged in a variety of sizes, it will pay you to investigate the advantages offered by a fast, adjustable wrapping machine.

One machine, like our Model FA, will handle as many as a dozen different sizes, and may be fed directly from the cartoning machines. This wide range, plus its speed of up to 100 packages per minute, enables it to replace several older type machines. That means less money tied up in equipment . . . a saving in floor space ... lower labor cost. If the diversity of your line has compelled you to wrap by hand, the savings are even greater.

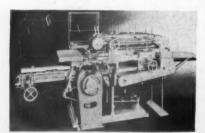
Our machines are adaptable to virtually all types of plain or printed wrapping material, thus enabling you to wrap your product in the most appropriate and appealing manner . . . The Cara Nome packages, for example, are sealed in a new type of delicately embossed cellophane, which adds a definite note of distinction to the packages.

### Let us help you

To lower your costs, or improve your package, it will pay you to consult "Package"-as so many manufacturers are now doing. Write or phone our nearest office.

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### MODEL FA

The Model FA which wraps the Cara Nome packages, illustrated above, is one of over 80 models in our line. In addition to wrapping cartons, the FA can be adapted to wrap flat objects on a card and goods in open boats. Accommodates a wide range of sizes, adjust-ments being made by hand-wheels. Has a speed of 40 to 100 packages per

### PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

for mica washers; to Texas City, Tex. for paint thinners; and to Augusta and Rossville, Ga., for cloth. Packard buys tools in Iowa, thermostats in Tennessee. wood parts from Mississippi.

· Many Sources-Most auto companies have two or three sources for the same part. Packard buys bearings from 19 companies; bumpers and bumper parts from 6; castings from 34; and door handles, hinges, and locks from 5.

The auto producer buys the same part from so many different companies for a very good reason: protection. They don't relish being caught as they were last winter when a strike at Carter Carburetor Co., St. Louis-one of the big suppliers-left some automotive concerns short. (They shipped cars without carburetors to their dealers; the carburetors followed later.)

• Ancient Ties-Some supplier-automaker relationships are of long standing and closely integrated. Thus, Chrysler looks mainly to Briggs Mfg. Co. for body stampings. When Briggs output is stopped, Chrysler plants close in a matter of hours.

That Briggs-Chrysler tie illustrates the point where the multiple-supplier system falls down. For large partsstampings, wheels, or springs-it often doesn't pay to have too many sources: Duplicate tooling for big parts costs too

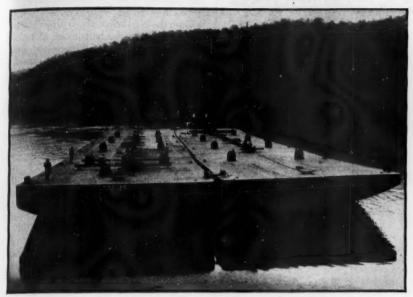
• Small Businesses-Some firms in the parts industry are as large as, or larger than, the companies they supply. But most parts producers are small businesses; they usually employ fewer than 500 workers apiece.

A lot of the smaller suppliers started because their owners had a bright idea for a part. Such firms may make only that one part. Anderson Co., of Garv. Ind., started operations in 1923 with 25 workers. Its specialty: windshield wiper blades and arms. Today the company employs more than 350 employees, and has marketed millions of wiper blades of a design patented by the company's inventor-founder.

• Room for More-By such standards, the parts industry is not a closed business. There is always room for a researcher or inventor who develops a new gadget, or a better way of producing an established product. In the accessory business, especially, a novel idea may sweep the country. Examples: foglights. or the recent new type of sun visor, which are bringing tidy sums to their manufacturers.

Replacements are a mainstay of some parts makers, who sell through jobbers and distributors to retail outlets Most companies that sell in the original-equipment field also operate in the replacement market. Replacement markets pay better, but there's more prestige in supplying original equipment. Besides, replacement sales are often tied in.

### TRANSPORTATION



OIL BARGES like these will be turned out faster as . . .

### Waterways Get a Boost

Rail freight rate increase of 40% since war's end heralds a possible boom for barge business. Biggest users will be the bulk shippers of such commodities as oil, steel, and grain.

The oil industry's demands for steel to keep up production and repair of petroleum barges are well on the way to being met this week. Only two technical steps have yet to be taken by government: approval by the Secretary of Commerce and by the Dept. of Justice.

• 20,000 Tons—The tipoff was last week's O.K. from the Steel Industry Advisory Committee to a 20,000-ton-amonth allocation to the barge builders. The allocation covers both wet and dry cargo barges. But the Office of Defense Transportation—which will handle the program for the Commerce Dept.—indicates that: (1) Wet barges will get the bulk of the steel; and (2) most of the wet barges will be for petroleum. There's some need for liquid chemical barges, but the number involved won't make any big dent in the quantity that will go to carry petroleum.

In fact, it's pretty sure that the actual tonnage to be allocated to petroleum barges will total about 17,700 tons a month—the amount the National Petroleum Council originally said the industry needed.

The steel allocation would represent an actual 20% to 30% increase in barge production over current levels.

• Sudden Interest—The American businessman has suddenly become mighty interested in the barge-building program. Rail freight rates have gone up more than 40% since the war's end, and he's looking for a cheaper means of transportation. That may mean a boom is in the making for the slow old barge business.

The biggest savings in use of barges go to shippers of bulk commodities such as coal, oil, steel, and grain. There are three industries most suited for increasing their use of the nation's 27,000 miles of navigable rivers and waterways—oil, steel, and grain. Here's how the situation shapes up for each:

### Oil

Higher rail rates are forcing oil companies to use other forms of transportation where possible. The companies have gone over in a big way to pipelines, trucks, tankers—and barges. Oil men say that the barges will get a big share of this division, because they provide the second-cheapest method of hauling petroleum. For example: The water rate on a net ton of oil from Baton Rouge to Pittsburgh is \$6.02. The rail rate is more than double that—\$12.62.

Pipelines are cheaper than barges. But they have a big drawbaek: If they are to pay, they must carry a continuous large volume of oil. There are a couple of catches to using barges, too: (1) the



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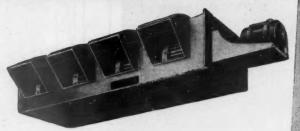


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location of oil wells and refineries; and (2) the fact that northern waterways freeze in winter.

• Growth—Neither of these problems as enough to keep the barges out of business. In fact, water terminals for the storage and handling of petroleum products have been mushrooming.

In 1926, there were only 49 such terminals on the Mississippi River and its tributaries. In 1946, there were 282. The same trend has taken place on other rivers and waterways.

### Steel

Barge transportation for steel will grow considerably, too. The reason here is also recent—the shift in transportation cost to the steel buyer brought on by the new f.o.b.-mill price system (BW—Jul.10'48,p19). Bargelot shipments of steel offer a huge saving over rail rates. For example: The rail rate on 500 tons (a barge load) from Chicago to Houston is \$15.80 per ton. By barge, it comes to \$6.04 a ton. (Carload quantities shipped by an all-water route generally run 20% under rail rates.)

• It Will Take Time—But the shift to barges by steelmakers won't be swift. For one thing, there just aren't enough barges to handle a big volume of traffic. For another, barge-loading facilities at mills are inadequate: Steel mill facilities have been set up to ship chiefly by rail.

Nevertheless, the trade estimates that barge shipments of steel from Pittsburgh down the Ohio River will double within the next two years.

### Grain

Once more, savings in costs are going to boost grain traffic on the waterways. With grain prices declining and rail rates rising, grain men are already clamoring to get their stuff on the water. Here's why: From Ottawa, Ill., to Chicago, the rail rate on corn is 8.36¢ per bu. By water, it costs 2.16¢. (There is a catch: Trucking, handling, and "trimming" charges add another 2¢ to the barge rate; even so, the saving is substantial.)

• Supreme Court Spur-Last year the U.S. Supreme Court handed down a ruling that has given a hypo to water shipment of grain. In the Mechling Barge Lines case, it ruled that "the inherently lower transportation charge of barge carriers" must be protected from attacks by the railroads. Result: Many companies have started to build elevators along the rivers and waterways of the nation's grain belts.

### Past and Future

The amount of freight hauled over the inland waterways has increased ever since the early depression years. In 1934,

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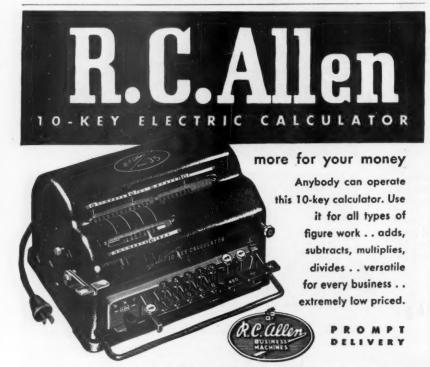


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for example, 363-million tons of freight were shipped by barge. In 1946, the amount had risen to 428-million ton

Some of the individual waterway have increased tremendously. On the Illinois Waterways, for example, traffigumped from 1.7-million tons in 193 to more than 9-million last year.

• Action—The barge line operator aren't letting this bonanza slide by un noticed. For more efficient service at the terminals they are installing endless belts; power-lift trucks; four-wheel trailer-trucks; high-speed, diesel-operated cranes; water-level docks; facilities for faster turning of barges.

Likewise, the industry has already attacked another problem—speeding up their travel time. The government-owned Federal Barge Line has taken the lead by building an integrated tow (BW –Jun.26'48,p23), consisting of nine barges and a towboat. It can go twice as fast as equipment commonly used on waterways.

### New Air Program

Backers of an over-all federal plan for developing civil aircraft will tackle Congress a second time.

There's going to be another showdown in the next session of Congress over the government's program for the development of commercial cargo and transport planes.

• Opposition—That became clear last week when the five government agencies behind the program set up a committee to sketch out a blueprint. Despite storm signals from the aviation industry—which has turned against the whole idea—the committee intends to have a plan ready to submit to Congress in January.

The new group has been formed by the Civil Aeronautics Board, Civil Aeronautics Administration, National Advisory Committee for Aeronautics, Navy, and Air Force. It is headed by Grant Mason, former CAB member and now assistant to Assistant Secretary for Air Cornelius Vanderbilt Whitney. The committee includes: CAA representative George Burgess; NACA representative Ira Abbott; CAB member Harold Jones; and Navy representative James Cary. It will function in three subcommittees:

A SUBCOMMITTEE ON REQUIREMENTS to determine the present and future needs of airlines, the armed services, and other aviation interests for transport and cargo craft.

A TECHNICAL SUBCOMMITTEE to study

A SUBCOMMITTEE ON RECOVERY to help



# What they learned on a fish boat may cut your power costs

SOMEWHERE east of Gloucester there's a 98 foot fish boat homeward bound with ninety-five tons of redfish in her hold. Often fighting cruel winds, monstrous waves and crushing ice, the boat's power plant may make the difference between profit and loss on the trip.

An engine breakdown puts the ledger in the red. With profit margins slim, a slow trip from the banks or excessive fuel costs bring up red figures again.

Cooper-Bessemer engineers studied fish boat problems, designed special diesel marine engines to help solve these problems. They made dozens of minor improvements such as tin-plated pistons, saddle-type connecting rod pins, precision-type, thin-shell bearings tremendous trifles which add up to lower cost power that owners swear by. Many a fleet has used nothing but Cooper-Bessemer diesels for years.

This same extra care and study of specific problems has resulted in Cooper-Bessemer's announcement of

one new development after another. That's why Cooper-Bessemer supplies efficient power at lower cost for railroads, refineries, petro-chemical plants, oil and gas lines, and for every other user of heavy duty power. Have you heard about the new gas-diesel, the most efficient prime mover in existence?

If you want to know how you can cut your power costs year in, year out, find out about the *new* things being done by one of America's *oldest* engine builders.





# HOW AMERICAN INDUSTRY WAS HELPED TO INCREASED PROFITS LAST YEAR

Many large industrial plants were helped to increase profits last year by the Bausch & Lomb Industrial Vision Service. This service positively demonstrated its value by reducing accidents, increasing production per worker, improving quality, decreasing training costs, lowering labor turnover and boosting employee morale.

The B&L Vision Program is the result of more than eight years of scientific research in industry. Research showed the direct relationship between employee job performance and specific visual skills...showed that every job has definite visual requirements which can be scientifically determined. Against these standards are compared the visual skills of present and prospective employees. Those failing to meet the standards may be helped by professional eye care, or may be transferred to departments or jobs where their vision is no longer a handicap and often an asset.

With competition becoming keener and cost again an important factor in marketing, every executive is doing his level best to strengthen the position of his company by utilizing cost cutting methods. B&L Industrial Vision Service will help your company lower costs and thereby increase profits. Look into this proved plan today.

the government recapture, at least in part, its costs for commercial protype development.

• Early Victory—In putting together the new committee, backers of an overall development program are trying to make up for a defeat in the 80th Congress.

Last spring the House pushed through a bill for a five-member Civil Transport Aircraft Evaluation & Development Board; it was to launch a government-financed program of commercial plane development. In the beginning, the project had the approval of airlines, manufacturers, and government agencies.

• Double-Take—Then aircraft manufacturers took a second look at the measure, sponsored by Sen. Owen Brewster and Rep. Carl Hinshaw—and cooled.

Glenn L. Martin Co. and Consolidated Vultee Aircraft Corp. turned the coldest shoulder. The program could mean that airlines would hold off purchasing Martin's 2-0-2 and Consolidated's Convair—and wait for the new types which the government-financed program would place on the market in three to five years.

Cutbacks in sales would be a blow to both companies. Development costs on the 2-0-2 and Convair planes had been staggering.

• Government Control—Other aircraft manufacturers also turned lukewarm. But they soft-pedaled their opposition to avert a clash with air transport interests.

Here's what they didn't like: The program would whittle commercial cargo and transport plane development down to a few (probably three firms with government-financed projects). In addition, the government-not private industry-would decide what types were to be developed. After they were developed, the Secretary for Air would have power to set the sales price. Manufacturers could not make any changes in design without the approval of the Secretary.

• Blocked in Senate—Manufacturers, buttressed by economy-minded senators, formed a last-minute coalition, blocked approval in the Senate.

Under the Brewster-Hinshaw proposal, development was to be financed with Air Force funds. The theory was that the new planes would be an arm of national defense, a reservoir for the military in time of war.

Last week, Brewster and Hinshaw triumphantly back-patted the new committee into blueprinting once again a government commercial plane development program. Membership on the committee corresponds to that of the Civil Transport Evaluation & Development Board proposed in the Brewster-Hinshaw measure.

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### DELIRIUM PREMIUMS

The use of premiums as a sales-stimulant is skyrocketing, according to the advertising press, and is now much greater than it ever was before the war. It is so great, in fact, that premiums, in themselves, constitute an expanding American industry of no small size.

Paper plays an interesting and important role in this industry, for it is obviously as vital to the creation, manufacture, distribution, packaging, and advertising of premiums as it is to the production, packaging, and promotion of those products which rely upon the lure of premiums for increased sales. The continuing research which leads to the continual improvement of all Mead Papers of the Mead, Dill & Collins, and Wheelwright lines is the premium offered by "Paper Makers to America" to American industry. It is your assurance that these multipurpose papers will continue to be "the best buy in paper today."

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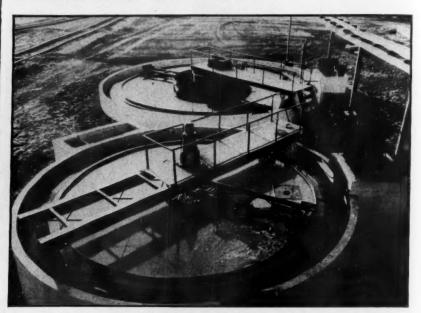
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# MERRILL LYNCH, PIERCE, FENNER & BEANE

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### **PRODUCTION**



BUILT-IN tanks take variety of industrial wastes from . . .



IN-THE-PLANT piping and fixtures, located near ceiling. Result:

### Plant Neutralizes Own Waste

No streams are polluted by New Departure's ballbearing plant. Designed right into it is a waste-control system that handles a complex variety of liquid waste from metalworking operations.

It looks as though the U. S. is going to make a real effort to clean up a mess that's been growing by the year—pollution of streams.

• Five-Year Plan-Last week the Public Works Administrator, Maj. Gen. Philip B. Fleming, said that the government is

mapping a five-year program. It will spend nearly \$25-million a year to aid construction of sewage treatment plants and to study control methods.

Meanwhile, industry is taking a long look at its part of the problem, for it's up to management to help remove toxic wastes, spent oils, and acids from liquids before they are discharged into sewers and waterways.

• New Departure—A good example of what's going on in this direction is the work of the New Departure Division of General Motors Corp. at its new ballbearing plant in Sandusky, Ohio (BW—Jun.12,48,p68).

The New Departure case history points up this fact: Handling and treatment of industrial waste is going through an evolutionary growth—just as the handling and treatment of sewage did. There's no pat answer to any individual problem. But there is a trend to incorporate facilities for waste treatment in today's plant design.

New Departure's problem was particularly tough because of numerous metalworking operations. These produce all kinds of liquid wastes—alkalies, acids,

emulsions.

• Golden Opportunity—In the 563,000 sq. ft. of manufacturing area, there are 10 points of origin for waste: ball shop, press room, machinery department, heat-treat, grinding, pickling, chrome-plating, laundry and drycleaning, forge shop, and miscellaneous operations. When the plant was still in the design stage, New Departure decided to integrate waste treatment with manufacturing layout.

Albert Kahn Associated Architects and Engineers, of Detroit, were called in to design and supervise the construction of such a system. Harry D. Unwin of the Kahn firm directed the project.

• Four Stages-Kahn broke the job down into four primary steps:

(1) Find out about existing water conditions and legal requirements,

(2) Analyze the main types and causes of waste,

(3) Determine the most efficient method of collection and handling,
(4) Study the available methods of

treating the collected wastes.

The planners first went to the Ohio State Dept. of Health. Here they found that the department has no over-all rules, but considers each case individually, taking into account plant location and point of waste discharge. Regarding New Departure, they learned that water flow in adjacent streams was not enough to dilute toxic wastes that might harm cattle. Also, floating oil would make a grade-A fire hazard—besides being unsightly (the stream flows through a golf-course). So these requirements were set up: Chromium should be no more than 2 parts per million; emulsified oils 30 p.p.m.; suspended solids 20 p.p.m.; pH range 7.0-10 (that's a measure of acidity).

• One Neutralizes Another—Here is what New Departure had in the way of waste; weak alkalies (from plating, steamcleaning, laundry, etc.), spent pickleliquor (from steel descaling operations),



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FR Between the covers of this colorful booklet is

acid-bearing waters (from chromic-acid rinse and Parkerizing systems), and oiland-water mixtures used to cool cutting tools.

Right away it was found that the spent pickle-liquor could help the weakacid waste to neutralize the alkalies. It could also help separate some soluble oil from the coolant mixture.

• Double-Purpose—There was a possibility that the flow rates and degree of contamination would vary as the plant operated. So the wastes are held in a reservoir. When they are introduced into the treatment plant, rates of flow can be controlled to get a more uniform concentration.

Two basic collection systems are used. Alkalies are taken through overhead pipes to receiving tanks. When waste coolant and waste soluble oils are discharged, it's at a time when little or no alkali waters are flowing. Thus, the same tank and lines do a double job.

The acid collection system takes waste pickling water and rinse water from the chromeplating tanks. When old pickling-tank acids must be removed, they are flushed through the same lines at a time when the other acid wastes aren't flowing. The pickling-tank water is collected separately for its use in separating out soluble oils in the treatment process. This doubleduty use of plant piping makes the sys-



### Streetlight Test

Streetlighting takes a scientific turn in the laboratories of the General Electric Co., Schenectady, N. Y. Lighting engineers have rigged this mirror to swing in a full circle around the base of a test streetlight. At any point in the circle, light beams striking the mirror reflect to an electric eye 25 feet away. The electric eye measures light output from all angles, makes sure light goes where it's needed most.

PRODUCTION TRIPLED!
UNIT COST CUT 60%



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Even if your products are entirely different in size and shape TOCCO can probably provide similar cost reductions and production increases for you.

- Nash Motors, Kenosha, Wisconsin reports the following benefits from TOCCO Induction brazing of drain flanges to automobile oil pans:
- 1. PRODUCTION TRIPLED— Using a hand torch, production was only 21 brazed assemblies per hour. TOCCO brazes 75 per hour—357% of former output!
- 2. COSTS CUT—At the same time TOCCO Induction brazing cuts labor and material costs from

\$12.75 to \$4.90 per hundred—a reduction of 60%, representing a saving of \$6.00 every hour.

3. OTHER ADVANTAGES—include a neater, better looking brazed joint, and a complete elimination of leakers and subsequent repair costs.

TOCCO Engineers are glad to help you find applications in your plant where TOCCO Induction Heating would increase your production, cut your costs and improve your products.

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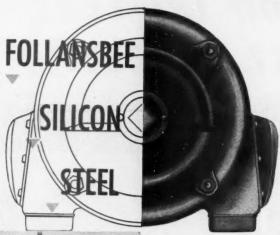
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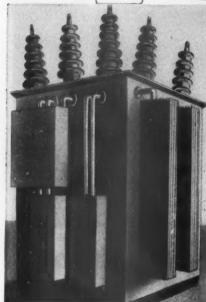
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URGENT: STEEL NEEDS SCRAP-KEEP IT MOVING

tem pretty flexible, keeps piping to a

• Why Chemical Treatment?—Various methods of treatment were open to the engineers. The final selection was primarily based on this fact: The wastes were chemical in nature, and they could be used to neutralize one another.

So chemical treatment got the nod. Another advantage of chemical treatment is that it allows control of flow rates of raw waste and treating agents. Such control can be automatic. Also, wide ranges in pollution concentrations can be handled without much change in equipment. Power costs are low. And the chemical system can be adapted to future changes in production which might introduce new pollution factors.

• Time Schedule—To cut operating costs, wastes are accumulated for 24 hours, then treated at once on an eighthour shift. One man can tend this.

If wastes are produced slowly, they can be stored until a sufficient volume piles up to allow a full eight-hour operation of the treatment plant (picture page 48).

Actual treatment consists of (1) partial removal of soluble and insoluble oils; (2) chromate reduction to take out chromium in the weak-acid waste; (3) removal of solids by precipitation; and (4) drying and disposing of sundge.

• Lessons—New Departure's experience

 Lessons—New Departure's experience thus far brings out four points of interest to any industry concerned with waste disposal:

All methods of waste control have to be carefully studied—reclamation, dilution or treatment at the source, segregation

No one waste should be considered independently. The possibility that one type of waste will neutralize another should be analyzed.

The layout for collection and treatment must be flexible enough to take care of variations in the compositions of the wastes.

The effect of changing production methods and the possibility that different process liquids may be used must be studied.

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#### ALUMINUM BRIGHTENER

Philadelphia Rust Proof Co. says that it has found a way to brighten aluminum without buffing or polishing. Its method: an electro-chemical process called Lustrik. The company says the process gives a high luster that won't smudge or fingermark; if you need added protection, the aluminum can be anodized (oxide-coated) after it has been given the gloss treatment.

Right now the company is using the process to do job work at its own plant. After patents are applied for and technical difficulties ironed out, licenses may

be granted.



# Heavy Date - Abetted by High Vacuum

THAT handsome tie clasp being so carefully adjusted displays the young man's initials. These initials were beautifully plated in gold in a DPI high-vacuum coater unit. The holder is molded plastic—plastic made with a plasticizer that has passed through a high-vacuum molecular still.

Our young lady is artfully arranging a gauzy scarf sprinkled with sequins —sequins in brilliant metallic coatings deposited under DPI high vacuum.

Our young pair will glide through the night on a cloud—automobile to you, top down of course, the road ahead illuminated from sealed beam headlights, whose reflectors were silvered under high vacuum.

High vacuum is finding more

and more commercial applications, in fractionating many substances once thought undistillable, in extraction of vitamins and hormones, in processing foods, chemicals and plastics, in smelting and heat-treating metals.

...a precious vaccine had a "shelf life" of only a few months. DPI engineered and built a high-vacuum dehydration unit that extends the shelf life of the vaccine to a full year.
... aided by a DPI high-vacuum

pump, electron microscopes are magnifying objects to 200,000 times their size, enabling sciencists to see and photograph viruses for the first time.

Perhaps high vacuum can profit your business—in research—in producing better quality—in cutting costs. DPI welcomes inquiries, write . . .

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per year

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BAKER Trucks play an important role in reducing man hours for han-dling by 42.5% while increasing tonnage by 86%. Other equipment includes pallets, special racks, trailers and drag-chain conveyors.



### Flow CONTEST WINNER

The detailed account of this material handling operation won second prize in the 1947 Flow Cost Analysis Contest for Charles H. Day, Assistant to General Manager, Chicago Operations, Sherwin-Williams Company.

If you have a material handling problem, a Baker Material Handling Engineer will gladly show you bow you can make similar sacings.

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PARTS SUPPLY IS PLOTTED in the CONTINUOUS GRAPHS which roll past form of line drawn by a colored pencil on . . . checking guides in . . .





PRODUCTION-CONTROL CENTER where one man keeps tabs on thousands of parts

### Mechanized Graphs Cut Control Costs

Lion Mfg. Corp. speeds up paperwork of keeping track of assembly operations, and so helps future production planning.

Paperwork is one part of a manufacturing operation that's hard to cut down. Regular records of component parts must be posted as a check on production and on whether there's enough inventory on hand to meet assembly schedules. Usually, such posting requires a lot of clerical help. A disadvantage is that it's difficult to run a quick check on the production status when many separate cards must be handled.

This was the typical situation Lion Mfg. Corp., Chicago, faced when it adopted a mechanized visual control system. Now it has speeded up production

checking, and one clerk does the work that three used to-and does it better. · Graph Rolls-Essentially, the operation is a mechanized graph. Records are posted on continuous sheets of graph paper 32 inches wide and 50 yards long. This paper is wound on reels fitted with a motor drive. The whole mechanism fits inside a compact lightweight housing. A gearshift allows the clerk to control forward or backward movement of the continuous record; a rheostat lets him control the speed.

The clerk plots each component part of an assembly individually on graph paper in the form of a line. (Up

# Tough...flexible...decorative...

maybe it can give you ideas!



THE material you see above is braided wire. Here at National-Standard it is produced in almost limitless variations... flat, tubular, plain, beamed, springlike or untempered, tight or expanded, in many wire sizes, in a great many widths, and of any metal that can be drawn into wire.

At present, the most common uses are for reinforcing pneumatic tire beads, high pressure hose and other rubber products. In these applications its strength and mechanical adhesion qualities are unsurpassed.

Considering its limitless variations and unique qualities, braided wire is bound to have many other effective applications. Perhaps it can save or make money for you! An interesting possibility, for example, is its use with transparent plastics to produce pleasing patterns as well as reinforcement.

If all this gives you an idea you'd like to explore, be assured that National-Standard, as usual, is ready to cooperate with you all the way. Let's talk it over. Just get in touch with the National-Standard Company, Niles, Michigan.



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When you add, subtract, multiply or divide with a Clary, 263 basically new ideas are working for you. No need to train yourself to a machine—the Clary is designed to operate as you think and as your hand reacts. Here's a new standard in adding machine simplicity and ease of operation... it's the adding machine the business world is talking about.

If you haven't seen or operated a Clary, you'll find time-saving and restful advantages . . . advantages found only in exclusive Clary features. See for yourself what a difference a Clary makes. Call your local representative today for a demonstration date. Or write to us . . . we'll be glad to arrange a demonstration for you. Prices start at \$179.50 plus tax.

Factory-approved service in your city



to 1,800 parts are plotted on each machine.) The posting shows: part number; part name; quantity required for assembly. The length of the plotted line shows at a glance the quantity of that part actually in the plant.

Parts processed in the plant are

Parts processed in the plant are plotted in blue pencil; purchased parts in red; "borrowed" parts from other

assemblies in green.

Master assembly schedules, made up weekly, are placed at the top of each machine. Made on similar graph paper, these master schedules don't move. Thus, the clerk can always compare at a glance the final target with the number of component parts recorded and on hand.

• Bank of Machines-A separate control machine is used for assemblies. Information is sent to the production-control department via facsimile writing machines connected with the receiving room (purchased parts) and the routing department (processed parts). Five machines are used for regular production assemblies (some of these carry two or three production assemblies); two machines keep surplus parts records. These are used by the purchasing department to check present inventory before new parts are ordered, and by production before processed parts are ordered. This has enabled Lion to cut excess inventory 50%.

Each machine is fitted with two sliding guide bars. One can be set at present production point; the other, at planned production point. Then, as the graph is rolled past at slow speed, parts shortages are promptly apparent.

Payoff—Lion has found that the machine technique is not only economical, since excess inventory and production are cut down—but also records are more accurate, and considerable paperwork and filing space is saved.

The biggest payoff comes when management is planning future production. At that time, meetings are held in the production-control office. Each machine is set at slow speed. As the graph for each part comes into view it can be checked immediately against the master chart. When a shortage is apparent, the machine is stopped. Then the bosses talk over what they can do to correct the situation.

#### CONSTRUCTION RESEARCH

Organized research in the building industry is going ahead at a clip of about \$15-million a year, according to a study made by the Construction Industry Information Committee. Universities and institutions are also spending big money in the drive to lower costs and raise the quality of housing and other construction. Federal agencies are putting up another \$1½-million a year for work on the problem.

### **NEW PRODUCTS**



### Big Tire Pryer

Changing tires on giant earth movers can be done quickly and on the job with a tool developed by Firestone Tire & Rubber Co., Akron, Ohio.

The huge tires often weigh as much as 1½ tons. After months of use, the tires "freeze" to the rims. As a result, tires have had to be changed with special stationary equipment-often many miles from the job.

With the Firestone tool, tires can be pried away from the rims in a matter of minutes. The tool is compact enough to be carried along with other mechanical maintenance tools in the

One end of the tool, an adjustable hooked arm, fits over the rim flange. On the other end, powerful claws go between the tire bead and the rim bead seat. Using a ratchet lever which works a mechanical screw, the operator can bring up to 5 tons pressure on the bead through the tapered claws, which force the tire away from the rim.

The tool can be adjusted for use on rims ranging from 20 in. to 33 in. in diameter. Firestone Steel Products Co. does the manufacturing.

· Availability: immediate.

### Aluminum Engine

A 1½-hp. gasoline engine has been announced by Leading Engine Co., 28829 Orchard Lake Rd., Farmington, Mich. The engine, constructed of alumi-mum, weighs 35 lb. Cylinder and crank-

case are two separate parts; this reduces repair costs as well as cost of scrapping defective pieces. The head is cooled by

For \$8, you can replace the 21-in.bore cylinder and piston assembly by one of 2% in. bore, developing 21 hp. A bell-shaped crankcase and a hollow scoop extending down from the con-necting rod into the oil makes lubrication effective in almost any engine position. Repair and replacement are said to be easy. The 1-in, diameter crankshaft can take nine different kinds of

takeoff pulleys and gears.

The light weight and the speedy bolton mount will be especially helpful to machine-minded small farmers, the company thinks. The engine can be readily interchanged between a garden tractor, a motor scooter, a generator set, a mower, a sawing unit, and any other implement that operates on small power. Another potential use: on motor

Until full production is reached, the engine will be sold to lawn mower and garden tractor makers. Later, the company expects to expand into auxiliary electric power, scooter, and bike fields. · Availability: two weeks.

#### Industrial Air Cleaner

Water action and centrifugal force are used in a new dust separator developed for industry by Industrial Electro-plating Co., Inc. The Niehaus Dust Separator mixes finely divided particles of water with the dust-laden air from polishing, buffing, and grinding operations. Then, by centrifugal action, it separates the foreign materials.

After cleaning, air is discharged back into the shop from the top of the machine. Thus there is no heat loss. The unit has its own blower and water-circulating system. Refuse is collected in a portable tank beneath the machine.

There are no filters or bags to clog up or be replaced. The water action eliminates the fire hazard, the company says. The machine produces a 2-in. static pressure; that's sufficient to exhaust four regular-size buffing or polishing wheels up to 16 in. in diameter. It comes with motor, pump, and motor controls, can be placed alongside the buffing or grinding machines. The company address: 219 W. Vermont St., Indianapolis.

· Availability: immediate.

#### Mistless Press Ink

Ink mist has long been a troublemaker in newspaper pressrooms. The drifting, settling droplets not only dirty up walls and ceilings but pose a serious fire hazard. Cleanup has meant the

added cost of maintenance personnel.

J. M. Huber Corp., 620 62nd St.,

Brooklyn 20, now thinks it has solved the problem with an aqueous-emulsion news ink. Results of tests with two newspapers show that the ink (Huber NMP News Black) gives far less mist-

ing in press runs. In printing and running qualities, the ink was found to be completely satisfactory. Huber makes the product from pelletized carbon black produced by the company at its Borger (Tex.) plant.
• Availability: immediate.



#### Mechanized Surveyor

Surveying and staking out contour lines have long been accepted preliminaries in terrace construction and contour farming. Now F. W. Heckert Co., Inc., 36 E. First St., Dayton 2, Ohio, has developed an instrumentthe Levl-Trac-that does away with these first steps. Mounted on the hood of a tractor, bulldozer, or road roller, it will keep the machine moving around a slope at a constant level during digging or plowing.

The driver keeps his eye on a magnifying lens, a scale, and two columns of liquid in front of him. One column of liquid is stationary, the other rises and falls as the tractor moves up or down-grade. When the surging liquid is above the level of the fixed column, the tractor is moving uphill; when it is below, the machine is moving down the slope. Black lines on the scale show a 1% dip or rise. Side-hill tilt doesn't affect the accuracy of the instrument.

The liquid in the tubes won't freeze; it's sealed to prevent loss by evaporation. Compensation for extremes in temperature is automatic; there are no moving mechanical parts. Heckert says the tractor can be driven at any speed without affecting the action of the instrument. For night work, there is a built-in electric light.

· Availability: 30 days.

#### Steady Seam Welders

A new line of seam-welding machines is in production at Progressive Welder Co., 3050 E. Outer Drive, Detroit 12. The big feature of the line, according to the company, is the use of a roller head guided and aligned by four sets of antifriction rollers. These rollers force the welding wheels to follow small



deviations in material thickness and contour. Thus it is possible to maintain constant weld pressures-even where stock thickness varies along the

The rollers are matched in pairs and are adjustable; they guide the head along the full length of its vertical travel. The machine has a big throat clearance to handle bulky work. The company has cut electric-current loss by placing the transformer close to the welding arms, and has insulated the transformer to protect it from the high temperatures caused by heavy-duty welding.

The seam welders can be used on cold-rolled steel, stainless or other alloy steels, aluminum, and other nonferrous metals. The machines come in three basic sizes: light, medium, and heavy duty. Each size is available in three types-for circular welding, longitudinal welding, or both circular and longitudinal.

Availability: 8 weeks.

#### Automatic Packagers

Two new packaging machines that make bags, fill them with material, then seal them for market have been announced by Acme Pattern & Machine Co., Inc., 1559 Niagara St., Buffalo 13. One model makes square-bottomed bags, the other the pillow-type coverings used to package marshmallows and

The machines will handle any free-flowing material—beans, rice, candies, or salt. A special attachment allows processing of shredded products like cocoanut or salad mix. Devices to control the weight or volume of the filling

can be added.

The machine can make bags from any heat-sealing material—cellophane, pliofilm, heat-sealing papers or foils. When printed materials are used, a photocell arrangement controls the cutoff to keep the printing in proper register. Acme says that making the bags from fresh rolls of cellophane results in a stronger package.

Operating speeds vary from 25 to 30 packages per min.; changeover from one size to another is quick and simple,

the company says.

Availability: 90 to 120 days.

#### Portable Power

A tiny (2-cu. ft.) electric plant that you can stow away in a corner of your car trunk or in the bow of a boat will come in handy for vacation retreats. The gasoline-powered generator (Model 03AAE-1E) is manufactured by D. W. Onan & Sons, Inc., 2621 Royalston Ave., Minneapolis 5.

The plant turns out 350 w., 115-v. a.c., will operate standard light bulbs,

radios, and small motor-driven appliances. It can be started by hooking it up to an automobile battery; a special winding in the generator charges the battery while the plant is running. Battery cables, a receptacle to plug load in directly, and a high-low toggle switch to regulate the charging rate are standard equipment. Weight is 77 lb. Accessories that come with the unit include carrying handle, mounted 2-qt. fuel tank, muffler assembly, emergency starting rope.
• Availability: immediate.



#### Curve Maker

A flexible template will speed layout work when you're copying curves from blueprints or taking off construction lines. The template can be set and locked in any shape, contour, curve, or radius; it snaps back to a straight edge as soon as you loosen the wing nuts on holding bolts.

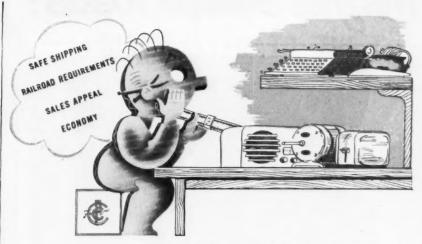
Made of spring steel and aluminum, the template comes in one-ft. lengths from two ft. up. Flexible Template Co., Camden, N. J., is the manufacturer; C. H. Clark & W. E. Poggenburg, 4900 Wynnefield Ave., Philadelphia 31, the sales agents.

· Availability: one week.

#### P. S.

Auto-Lok, engine-vacuum operated, protects kids who like to play with car doors. The vacuum holds spring-operated strikers in locked position, keeps back doors from opening until the driver releases the vacuum by pressing a button. Accurate Tool & Engineering Co., 640 Tenth Ave., San Diego, makes it.

A big blow for geologists looking for more oil can now be furnished with a seismograph blasting cap. The devel-oper: Western Cartridge Co., division of Olin Industries, Inc. The cap is about 2 in. long, about the diameter of a pencil. The big push comes from the use of RDX explosive-originally developed for wartime "blockbusters."



### FOR YOUR CONTAINER PROBLEM ... THERE'S A FORT WAYNE SOLUTION

Through all or any one of Fort Wayne's four co-ordinated manufacturing plants, the shipper commands design, engineering and research specialists who draw on Fort Wayne's 40 years of corrugated container experience. He gains from Fort Wayne's strict laboratory control of materials and methods, Fort Wayne's accent on uniform container strength, quality, performance. He discusses his problems with experts who know those problems—trained Fort Wayne representatives who know shipping from A to Z. In calling on Fort Wayne, the modern shipper takes advantage of a service that starts with his specific problem and creates the custom-built container that's the one right answer.

> CORRUGATED FIBRE BOXES CORRUGATED PAPER PRODUCTS

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# Magnet sweeps roads!

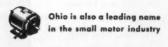


IF YOU haven't had a flat tire lately, you don't know how lucky you are! An average of 8.2 pounds fmetal per mile is collected annually by magnetic road sweepers in eight states. The American Public Works Association further reports that up to 75% of this ferrous metal is tire damaging.

Ohio Magnets quickly and efficiently collect foreign metal on highways ... airport runways ... main traffic arteries...parking lots. Three Ohio Magnets installed at the rear of a truck snapped up 4000 pounds of nails near a large packing house in three days!

How many potential punctures are there in your travelled areas? Don't guess - find out accurately

with Ohio Magnets and save time, money and tempers. Write today to Ohio - 25 years a leader in magnetic materials handling and separation. The Ohio Electric Mfg. Co., 5920 Maurice Ave., Cleveland, O.





### READERS REPORT:

### What a Knot Is-And Is Not

May I call attention to your use of

the word "knot" [BW—Jul.31'48,p10]? Generations of seamen and Mr. Webster decry the redundant expression, "knots an hour." A knot as a nautical measure involves the conceptions of both time and distance, is equivalent to a rate of speed of one nautical mile per hour.

W. F. ANDERSON

AKRON, OHIO

• Mr. Anderson and his authorities decry aright. Thus, Business Week in effect was saying-quite unnecessarily-"14½ nautical miles per hour per hour."

The whole concept is cleared up by a glance at the origin of the term.

Before the days of automatic logs, mariners literally used to "heave the log" overboard to see how fast they were going. They paid out a log-line attached to a so-called log-ship, which anchored one end of the line in one spot-more or less-while the ship proceeded on its course.

The log-line was divided by real knots 47 ft. 3 in. apart. This distance bears the same relation to a nautical mile (6,080.2 ft.) that 28 seconds bear to one hour (3,600 seconds). Sailors could tell how fast their ship was going by counting the number of knots that ran out every 28 seconds by the sand glass. Hence, if they counted five, the ship was traveling at 5 knots-or five nautical miles per hour.

#### Another Lease-Purchase Deal

We have noticed the attention you have been giving in recent weeks to various so-called lease purchases which have been negotiated by a great number of concerns.

You may be interested in the following information: Rapid construction is proceeding in the Bronx, New York, on the building of a new centralized warehouse depot of A. S. Beck Shoe Co. Originally acquired by A. S. Beck New York Shoe Co., Inc., the property was sold by Lionel Friedman & Co., Philadelphia, to Penn Mutual Life Insurance Co., which leased it back to the shoe company for a term of 25 years. The consideration involved is in excess of \$700,000.

We also call your attention to the fact that the factory which Shoe Corp. of America sold to Penn Mutual [BW -Jul.27'48,p84] was negotiated by this office. We have also handled such a sale with the Bell Telephone Co. of



# JUST LISTEN TO THE GIRLS IN YOUR OFFICE!

"I want a new typewriter!"



"We want new Royals!"



### WHY THE PREFERENCE FOR ROYAL IS BETTER THAN 2 TO 1!

Surveys show that girls who type prefer Royals 21/4 to 1 over any other make of standard office typewriter.

Even more—the preference for Royal equals the preference for the next three most popular standard office typewriters combined!

Why this overwhelming preference for one typewriter?

Because Royals have time-saving, work-saving

features not found on any other make. Because Royals are more durable-sturdier.

They spend more time on the job, take less time out for repairs.

So give the girls in your office the typewriter they prefer using. They'll do more work, better work. With Royal, you'll get the maximum return for your typewriter

investment!

# ROYAL World's No. 1 Typewriter

Made by the world's largest manufacturer of typewriters





Pennsylvania and have participated in many Sears, Roebuck deals.

Sydney N. Greenberg, Jr. LIONEL FRIEDMAN & CO. PHILADELPHIA, PA.

### Consumer Finances Survey

Sirs:

We are more impressed than ever with the intelligent way in which you have digested and presented the articles on the Survey of Consumer Finances [BW — Jun.5'48,p23; Jun.19'48,p21; Jul.17'48,p26]. In our judgment, the best formulated and most interesting reports of our surveys are those which appear in Business Week each year. Many thanks again for the splendid job you are doing.

We are all delighted that you have found the Survey of Consumer Finances

so useful.

RENSIS LIKERT

DIRECTOR, SURVEY RESEARCH CENTER, UNIVERSITY OF MICHIGAN ANN ARBOR, MICH.

• Business Week is happy to return Dr. Likert's compliment. In our opinion, the annual Survey of Consumer Finances (sponsored by the Federal Reserve Board and conducted by the University of Michigan Survey Research Center) is a brilliant contribution to economic research. The material that it provides is enormously valuable to businessmen and economists alike. The latest 1948 report appears on page 23.

### Ion Exchange Made Clear

Sirs:

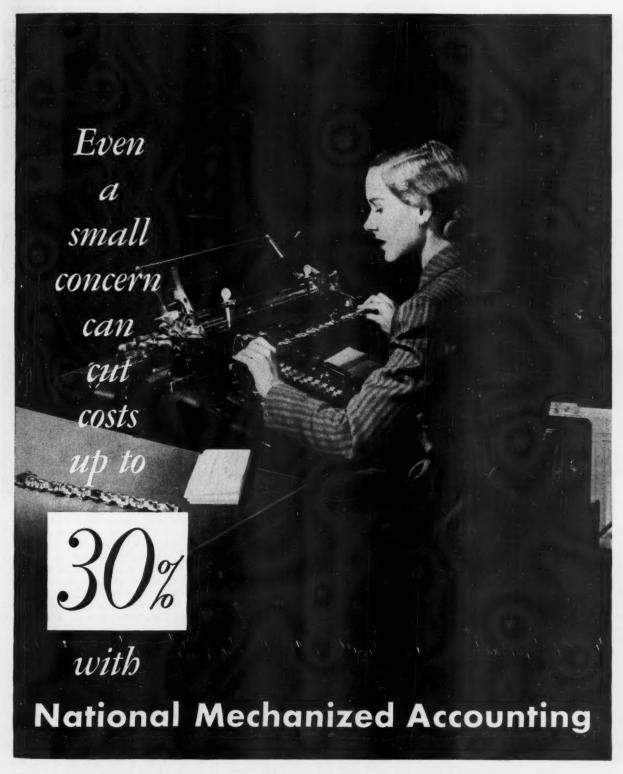
All the members of our technical and sales staff have read your article on ion exchange [BW—Jul.31'48,p32]. As one of the leading manufacturers of ion exchange equipment, we wish to congratulate you on a job well done and in a manner which explains a complicated subject so clearly. We can well realize the time and effort which was expended in its preparation.

Naturally we were both interested and flattered upon noting that several of the ion exchange units mentioned in your article were of our manufacture. We of the Illinois Water Treatment Co. are proud of the part we have played in both the introduction and promotion of ion exchange in the

United States. . . .

We as well as the other leading ion exchange manufacturers have installed equipment for many of the hundreds of various uses. As is indicated in your article, ion exchange has a tremendous potential.

As you can well realize, the subject of ion exchange is extremely difficult



What could it save for you? Whether you employ 50 or 50,000, mechanized accounting is the answer to today's high cost of hand-figuring. After mechanizing with National Accounting Machines, firms of every size report savings up to 30%. These savings

often pay for the whole National installation in the first year. Thereafter, they run on year after year as a clear reduction in operating expense. Ask your local National representative to check your set-up and report specifically the savings you can expect.



THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO



# Increases the value and enjoyment of your 16mm Sound Motion Pictures

• The theatre-quality projection of the RCA "400" brings you a more profitable return on your investment in 16mm sound motion pictures. Screenings of films for product promotion . . . sales and service training . . public relations . . employee indoctrination and training are enjoyed more, remembered longer, when projected with the RCA "400".

### Brighter Pictures! ... Better Sound!

Pictures have greater brilliance, contrast and definition—in black-and-white or color. Voices, music and sound effects are reproduced with the life-like realism and natural tone shadings that audiences enjoy.

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The RCA "400" is the easiest and quickest of all 16mm projectors to thread. Silent or sound film projection by merely turning a knob. Here's a lighter weight projector, easily portable for use in business, school, church, club, or in the home.

SEE IT... HEAR IT! Compare the RCA "400" feature for feature with any other 16mm projector. Judge it by a proof-test with your own sound films. For illustrated brochure and name of nearest dealer, write: Sound and Visual Products, Dept. 16H-V, RCA, Camden, N. J.

FIRST IN SOUND...FINEST IN PROJECTION



RADIO CORPORATION OF AMERICA

In Canada: RCA VICTOR Company Limited, Montreal

for the average business executive to understand. It is only through extensive effort on the part of the various manufacturers along with the publication of such articles as this that this goal can be obtained.

JOHN F. WANTZ

SECRETARY-TREASURER,

ILLINOIS WATER TREATMENT CO., ROCKFORD, ILL.

### "Factual...Tremendous Interest"

Ordinarily I am rather timid about publicity, but I must congratulate you on your splendid writeup of our plant [BW—Jul.24'48,p39].

While your article was factual, your style and presentation created tremendous interest with news services, movies,

and other magazine publications.

C. R. Hellstrom

PRESIDENT, SMITH & WESSON, INC., SPRINGFIELD, MASS.

#### "Cold" Liberation-or War?

Sirs.

Your article on Soviet war preparation [BW—Aug.7'48,p105] inspires the question of what happens to overemphasized armament programs. Do they invariably lead to war, or can they be abandoned? It the latter, what circumstances are necessary?

It seems clear that the present type of Soviet government will never voluntarily abandon its present type of thinking about armaments. The only hope, then, for abandonment without a disastrous war that would surely involve us, is in a change in the Soviet government or a gradual reformation of its

Such changes are unlikely unless ways can be found to influence the thinking of the people who are under Soviet domination and to encourage them to free themselves when the opportunity arises. The Soviet way of doing this would be by infiltration, which is impractical through the iron filter screen. We shall have to nibble at the edges. We need a "cold" liberation technique that can be activated on short notice whenever a soft spot dev lops anywhere in the communistic realm of influence.

If we can liberate enough people in the next few years, perhaps the idea can penetrate Russia far enough to result in a change in the government. If we can't, or if the activity draws the fire of the Soviets, we may be better off to meet the inevitable on as favorable terms as we can get—before armament emphasis goes to 100% over there

EDWARD N. HORR

EDWARD N. HORR & CO., CLEVELAND, OHIO

MORE FOOD OF HIGHER QUALITY, GREATER NUTRITIONAL VALUE AND FINER FLAVOR



# It's the food that makes the picnic



It's always the food that's the big hit at a picnic. And how good it tastes! Wherever family and friends gather, whatever the occasion, food is the cen-

ter of interest, often the topic of conversation.

For more than thirty-eight years, International has occupied a strategic position in the production of the nation's food, the basic source of our health and energy. Today, International supplies ingredients that are essential both to the producers and the processors of our food.

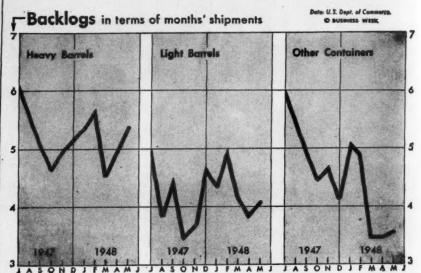
- Potash and Phosphate and complete Plant Foods to grow large yields of high quality, nourishing food.
- Ac'cent, a pure vegetable food product, used in the preparation and cooking of food to intensify its delicious, natural flavors.

International products thus contribute importantly to the nation's abundance of energy-building food of fine quality and appetizing taste.





### MARKETING



PENT-UP DEMAND for heavy steel barrels (and drums) stays high, while output

catches up in light barrels (and drums) and other steel containers (pails, etc.). But . . .

### Containers Are Still Short

Huge backlog of orders, created early in war, won't be whittled down much for several years. Badly pinched shippers thus rely heavily on used drums, making reconditioning a big business.

Ever since early in the war, the steel shipping-container industry has had a huge backlog of orders. Today, three years after the war's end, it still hasn't whittled much more than the back off the backlog. And container buyers, after eight years of shortages, are grimly beginning to believe that deliveries will not catch up for a couple of years more (charts, above).

• Two Factors—Behind the buyers' growing pessimism are two big factors: (1) mill allocations to the steel container makers; and (2) the sudden expansion of military requirements. The armed forces have recently called upon the steel shipping-container industry to turn out around 2-million heavy-gage steel drums for them this year and next. At the present time, no one in the industry seems to know where the steel for the needs of the armed forces is to come from—except from present mill allocations to the barrel and drum manufacturers.

Allocations for steel barrels and drums are running at the rate of 650,-000 tons of hot rolled sheet a year. The new military need will cut two ways: (1) It will take drums out of current and future civilian production; (2) it will take heavier gage steel—which in turn

will cut the total amount of steel available for containers.

• 27-Million Heavies—Shipments of heavy steel barrels and drums last year topped 27-million units. This was equaled only in the peak war year of 1943; it was over 4-million more units than were turned out in 1946. Makers on other, lighter types of steel shipping containers have set similar records. They point out that they have been able to cut order backlogs in the past year (chart, above)—even though the industry was operating at from 55% to 60% of capacity because of the steel shortage.

Today about 75% of all heavy steel drums are used by the petroleum industry which is having record production. Asphalt makers take a heavy percentage of lighter drums. Other big drum and barrel users are makers of shortening, paints, alcohol, alkali, chemicals, cola syrups, molasses, and linseed, palm, and cottonseed oils.

• Severe Shortage—Since early in the war, all these industries have been short of containers. They rushed in after war's end to place their orders for new containers—and found that they were practically being rationed. The shortage got more and more severe as shipments of



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Sealing Problem a Load?

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Our facilities are so complete, our experience so far-reaching, that we are well-equipped to meet any design problem.

Come to Sealing Headquarters for specially formulated sealers, coatings, adhesives and mastic compounds.



We seek the opportunity to work with you and develop the material that's most effective for your job.

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big users' products zoomed in the post-war boom.

To meet the problem, the container customers fell back on a wartime expedient—reusing what containers they have. The petroleum industry, for example, has built up the practice of buying back drums from customers in huge amounts. Today, the average petroleum drum will make sometimes as many as 10 trips before being junked or sold to the reconditioners.

• The Reconditioners—Before the war the reconditioners were the second-hand barrel and drum traders. Today, they make up a big business. Estimates are that they recondition around 5-million to 6-million barrels and drums annually. (They stick to the big babies; small steel containers don't bring in enough money.)

The industry now numbers about 250 firms in 38 states. All of them operate in the big industrial centers near their customers. Many reconditioners have up to \$1-million invested in plant; some of these put from 12,000 to 13,000 barrels and drums back on the market each week. Bigger reconditioners have facilities for relining drums with plastic materials, or for changing them over from tight-head to open-head drums. These processes increase the number of uses to which the second hand containers can be put.

can be put.

• Field Day—The reconditioners had a brief field day when OPA ended. Prices of used barrels and drums soared above those of the new product. They didn't stay there long: The big users started buying back their own drums, thus dropped out of the reconditioners' market; and high production of new drums has also been a factor in deflating used drum prices.

The big users are in the reconditioning business, too; during the past few years they have put thousands of barrels and drums back into circulation. Today, reconditioners' barrels and drums bring about 50¢ apiece less than new containers.

• Prices Up—Prices of steel shipping-containers rose 25% after the war. When the big steel mills boosted steel prices and went f.o.b. mill price (BW—Aug.7'48,p52), prices on all containers went up another 3.4%. For instance, U. S. Steel Products last week was quoting 55-gal., 18-gage steel drums at \$3.70 mill against \$3.58 before steel prices were raised. More than that, buyers are now paying full freight from the container mills to their plants. Formerly they got some freight advantages under the industry's zoning price system.

Meanwhile, higher costs have presented the big steel shipping container mills with a headache. Their customers now want to ship containers by truck in order to beat rail-freight costs. And

the mills just don't have enough truckloading facilities to do the job.

• Six Leaders—Of the 26 companies making steel shipping-containers today, five are subsidiaries of the big steel companies: U. S. Steel Products Co. (U. S. Steel); Inland Steel Container Co. (Inland Steel); Niles Steel Products Division (Republic Steel); and J. & L. Steel Barrel Co. (Jones & Laughlin). The sixth biggie, Rheem Manufacturing Co., is 30% owned by Bethlehem Steel (BW—Jul.31'48,p58). Back in 1944 these six companies had about 85% of the total heavy steel barrel and drum manufacturing capacity, according to WPB allocation figures.

Along with Southern States Iron Roofing Co., these biggies operate in all the big U. S. industrial centers. The rest of the companies are mostly single-plant operators. All told, there are 53 steel container-making plants in the country. Most plants are closer to the customers than to their sources of steel supply. That's because the industry's big problem has always been shipping the manufactured container by the cheapest and

shortest route.

• System Change—Formerly the industry operated on a six-zone pricing system. After the big steel companies changed to an f.o.b. mill-price basis, the container makers also changed: They set up either a straight or modified f.o.b. mill-price basis.

The recent changeover in prices and terms brought a host of new problems to the industry and its customers.

Typical was the case of New England paint and varnish makers who buy a lot of their containers from mills in the New York metropolitan area. Steel shipping-drums now cost the New England paint makers \$1 more rail freight than formerly (because former freight absorption is no more). Thus, New York paint makers get nearly a \$1 freight advantage if they ship their products into the New England market.

Though the steel shipping-container industry is having real trouble filling orders now, it does not believe that this condition is going to last forever.

• Research Project—Members of the Steel Shipping Container Institute, Inc., New York City, are supporting a big, long-range research program. Its aim: to find new uses for their containers, and to solve technical problems. The Batelle Memorial Institute in Columbus, Ohio, is conducting the research program.

The industry is seeking answers to its problems in lining containers with new lacquers and plastics. If it finds them, it will increase the scope of uses, open many new markets for steel containers. Standardization of surface finish of hot rolled sheet will help, too. If the researchers can find a way to do it, this will take a good-sized bite out of container-making costs.



BREAKWATERS, piers and lighthouses of concrete withstand relentless buffeting of waves. That same endurance makes concrete the favored material for pavements, for public buildings, for homes and farm construction, for water and sewer lines.

For streets and highways, concrete usually costs less to build than other pavements of equal load-carrying capacity and lasts longer at lower cost per year.

For hospitals and schools, factories and apartments, municipal and commercial buildings concrete also renders low-annual-cost service and provides firesafe structures of distinctive beauty.

These same reasons make concrete a wise investment for homes and farm construction. Concrete buildings are easy to heat and keep clean. Besides being firesafe they're stormproof, decay-proof, verminproof and termite-proof.

When you build for endurance at low-annual-cost—use concrete.







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A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work



Keys—placed at fixed intervals—make a permanent record on the dial encased in the clock; a daily report of your watchman's performance. The cost of this greater-property-protection service soon is refunded through reduced insurance rates!...Ask for sample dial (the tell-tale "bird") and details.

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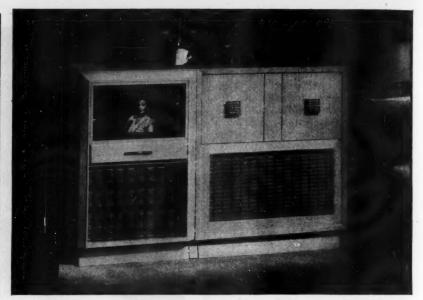
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TELEVISION SET to match console radio-phonograph goes on the market as part of . . .

### New Magnavox Sales Plan

Maker of high-quality console radio-phonographs, designed as fine furniture pieces, is adding more exclusive dealers, broadening its line to fight off radio industry's slump.

Signs that the bonanza days of the radio industry are over have been multiplying for more than a year. Postwar production got started early, and the industry has been turning out radios and radio-phonograph combinations at record rates. Table-model and portable radios have been plentiful since last summer. Since spring even sales of console radio-phonographs, slower to hit their production stride, have begun to slide off.

 Normal Slump?—Manufacturers think that the drop in sales is largely a return to the prewar seasonal pattern of the industry; radio sales normally slump during the spring and summer months.
 In any case, they are counting heavily on television to pull them out of the dip.

Last week Magnavox Co. issued its quarterly sales and earnings figures—and they reflect the industry pattern. Magnavox's sales for the three months ended May 31, 1948, were down to \$4-million from \$7-million in the same period a year ago. Earnings of \$125,411 for the 1948 quarter, equal to 21¢ a share, compare with \$627,253, or \$1.05 a share, a

Magnavox executives attribute the drop to delays in getting their television production under way, and to the return of the seasonal sales pattern of the radio industry. They are confident that the merchandising program the company launched last month will boost sales

for the rest of the year back to 1947's record levels.

• Plan-The program includes:

(1) A complete line of television receivers, to retail from \$299.50 to \$1,750;
(2) A two-speed record changer de-

(2) A two-speed record changer designed to play the new Columbia microgroove records (BW-Jun.26'48,p66);
(3) Addition of a console radio-phon-

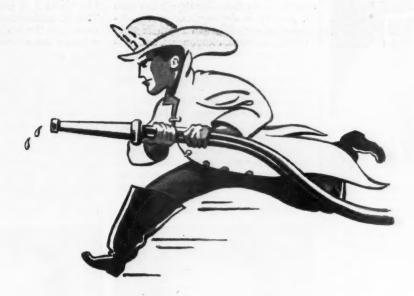
(3) Addition of a console radio-phonograph to retail at \$179.50, lowest-priced set Magnavox has ever offered;

(4) More selected dealers to give Magnavox coverage in untapped markets.

• Record Sales—Last year Magnavox chalked up sales of \$27.4-million. This was done through a merchandising policy that is the direct opposite of that followed by most leaders in the radio industry. The big-volume radio manufacturers usually offer a complete radio line—from inexpensive table models to high-priced consoles. And they sell through distributors to unlimited numbers of small dealers. (Philco and RCA have more than 20,000 retail outlets.)

Magnavox, on the other hand, has: (1) concentrated on production of high-quality radio-phonograph consoles; (2) sold exclusively through a direct manufacturer-dealer setup to a small number of selected dealers; (3) maintained from the beginning a firm, fixed-price policy, without annual model changes.

• Reorganization-Magnavox executives decided to put the company into the



### THE FAITHFUL FIREMAN

Always on duty...Always alert...Always prepared with a smothering shower of water at the first indication of fire. This unrelaxing guardian of life and property is the automatic sprinkler system found in most large buildings and factories. Its true value lies in its never-ending dependability...and the dependability of its source of power.

Many sprinkler systems are powered by completely dependable Wagner Motors. The extensive system in the St. Louis Municipal Auditorium, for instance, uses a 100-hp. Wagner Motor to pump water continuously under pressure in case of emergency.

Should you need motors for any of the thousands of applications for which Wagner Motors are most efficient...or should you

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Wadner Corporation

ELECTRIC MOTORS - TRANSFORMERS
INDUSTRIAL BRAKES
AUTOMOTIVE PRODUCTS



High water rates (easily justified by high costs of the municipal water works) caused an Ohio manufacturer to take action to reduce his own costs of water.

First step was to call in the Deming Distributor in his area. Arrangements were made with a local well driller familiar with underground water conditions in the vicinity.

Tests revealed good water under the plant. A deep well was drilled and a Deming Deep Well Turbine Pump of correct capacity was installed.

Compared with former costs of city water the manufacturer is saving more than \$3500.00 annually with the Deming Deep Well Turbine Pump.

You, too, may find that your company can utilize a good water source under or near your plant. Your Deming Distributor will be glad to cooperate. First, send for illustrated Bulletin No. 4700-8 which will give you a good idea of the advantages of Deming Deep Well Turbine Pumps and what these dependable units are doing for others in diversified industries and institutions. THE DEMING COMPANY 530 Broadway Salem, Ohio PUMPS AND WATER SYSTEMS quality radio-phonograph field in 1937, after the depression had forced it into a 77B reorganization. Except for a brief period in the 1920's, Magnavox had made no consumer radios.

But it had been one of the oldest names in the radio industry: It had been a pioneer in development of the dynamic loud speaker and a manufacturer of radio speakers, components, and public-address sound equipment. The Components Division is still the major U.S. producer of loud speakers for other manufacturers.

• Decision Makers-The decision to move into the consumer field was made by two men: Richard O'Connor, Magnavox president, and Frank Freimann, executive vice-president (pictures, below). O'Connor has directed finance and over-all planning; Freimann has been largely responsible for development of the radio-phonograph division.

At the time of Magnavox's decision,

PRESIDENT Richard O'Connor directs over-all Magnavox planning while . . .

almost the entire output of the radio

industry consisted of table-model radios. Gamble-Freimann and O'Connor gambled Magnavox's future on the belief that people wanted and were willing to pay for musical quality. Therefore, they felt, the field for a quality radio-phonograph, designed to har-monize with fine furniture, was wide open. They were also convinced that the radio industry's concentration on the low-priced table-model radio left another huge gap. These sets were marketed through thousands of small dealers-which left the better-class music, furniture, and department stores with-

for their trade. So Magnavox offered its high-quality, moderately expensive console combination on an exclusive franchise basis.

out a profitable line styled and designed

Magnavox officers believe that its direct-dealer sales organization gives the company the lowest distribution costs in the industry. They claim that selling and shipping expense come to just under 4%, compared with their estimate for the industry of about 20%.

Magnavox dealers last year averaged \$80,000 each in sales. On the average, 75% of their total radio sales volume came from the Magnavox line.

• Dealer Requirements-Because it operates without distributors, Magnavox requires its dealers to buy three times a year. That means that they must anticipate their requirements for at least four months. This policy contributes to low-cost production, since it permits Magnavox to plan relatively long runs of each cutting of a furniture model. But to protect dealers who get nervous over the size of their inventories, Magnavox this spring guaranteed them against price shrinkages.

• Expansion-Since the war's end, Magnavox has cautiously expanded its dealer



VICE-PRESIDENT Frank Freimann develops radio-phonograph division

organization. The company now has 650 dealers. It is adding new ones in markets where Magnavox formerly had no dealers, and in what the company considers secondary markets.

Magnavox's sales goal is 10% of the console radio-phonograph market. Models in 14 different furniture styles, with at least two finishes in each style, give Magnavox what it considers to be the largest radio-phonograph console line in the industry.

 Television—Magnavox is convinced that television will supplement but not replace radio-at least for the present. So the company's television sets are designed to match the radio-phonograph models (picture, page 74). All but three of the sets can be bought separately. Prices range from \$299.50 (for just a television set) to \$1,750 (for a model combined with Magnavox's highestpriced radio-phonograph combination).

### Stores Join Hands

Cooperative Charga-plate service in New York City may point the way to further joint efforts to cut costs.

New York's department stores have long been one of the most competitive retailing groups in the country. They have built their iron curtains so high that when there's even a little crack it's news.

This week 11 New York stores pooled their efforts in what they called a "cooperative shopping service." Actually, it means these stores now have one central organization that will send out charge account identification tokens to customers of all 11 stores. This will (1) reduce the stores' individual operating expenses slightly, and (2) make it easier for customers to do their shopping. And small as it is, it may mean that the big New York market is about to enter a new era.

• Charga-Plate—The department stores have adopted a standard Charga-plate identification token. Customers will identify themselves with the plate when they shop. The same plate will be used for all stores, thus eliminating duplication.

The service was developed by Farrington Manufacturing Co., Boston, back in 1928. Today 375 stores use it. There are 50 cooperative store groups now going—but New York heretofore has not gone into group use of the plates.

Here are stores in the New York operation: Arnold Constable, Bloomingdale, Franklin Simon, Gimbel, Lane Bryant, Martin, McCreery, McCutcheon, Saks Fifth Avenue, Saks 34th Street, and Stern Bros.

This week Charga-plate Group, Inc., set up by the 11 New York stores began to send out more than 500,000 plates to customers; their use will start Sept. 1.

• Reasons Behind It—Why the big stores have decided to work together for the first time is easy to answer. For one thing, any credit man will tell you that store frauds—particularly on charge accounts—are very high these days. Charga-plate will help to reduce these by (1) requiring identification and (2) automatically stamping customers names and addresses on sales slips.

But there may be deeper reasons, too, for the move. Briefly, competition in the past has been so tough that the stores have never been able to get close enough together to see that their problems are not individual but universal.

• What Next?—Since the end of the war, big-store sales have increased—but so have store expenses. Profits before

### **BUSINESS IN MOTION**

### To our Colleagues in American Business ...

This is the story of a briefcase with a new combination lock. In fact, it is the story of a growing line of leather goods bearing the lock. The people who carry that luggage probably are conscious of nothing except that it looks very well indeed, and that the combination lock is new in design, easy to operate, and entirely reliable. What more should they ask?

But there is an inside story that they would never dream of. They would never think that there is any connection be-

tween a compact carried by the ladies, and a lock on a brief-case carried by the men. But there actually is. You see, the leather goods company wanted that lock to be as near perfect as possible. Like anybody with a new idea, it was fussy about

reaching for perfection. So it went to a manufacturing jeweler to have the lock made. The idea was that such a company certainly could make the lock with the necessary beauty, precision and economy. It was an excellent idea, though somewhat unorthodox from the viewpoint of those who think only in terms of what is called "normal channels of trade." It is a pleasure to report that the association has proved to be extremely successful

Revere entered this picture because

the jewelry maker is an old customer for some of Revere's finest metals. Specifications for the lock included the use of solid brass for both exposed and operating parts for which beauty, reliability and corrosion-resistance are required. Die castings and also steel are used in their appropriate places, thus again demonstrating that there is no one metal suitable for every use, but that each metal has its proper field. Incidentally, solid brass is not only used in the lock, but also in the handle posts.

This case of the combination lock interests Revere not only because it uses Revere brass for quality, but because it represents a lot of imagination in selecting a fabricator. If a jewelry firm can make locks, perhaps a coppersmith could

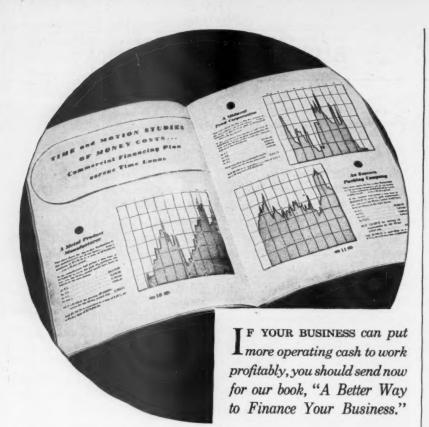
make earrings, and diversification would add to the security and profits of both. Imagination is a precious thing. Some people consider it the most important factor in business. Revere thinks it has some imagination. as have all good suppliers to business. Whatever-it is you make. Revere suggests you ask your suppliers to do a little thinking with you and for you. After all, every bill you pay, as well as every one you send out. includes an inevitable charge for brains, know-how, imagination.



REVERE COPPER AND BRASS INCORPORATED
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\* \* \*

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and after taxes have declined percentagewise (BW-Jul.31'48,p52).

The big mail-order chains have made serious inroads in the retail store field. And the apparel and variety chains have made big gains in dollar volume.

Right now, while customers have plenty of money to spend, growth of the department stores' competitors does not hurt too much. But what is going to happen when more normal times return, when customers have less money to spend? Will they spend that money in department stores, mail-order retail stores, or in apparel and variety chains? That's what department store executives are pondering.

are pondering.

• Radios Off-But their worries don't end there. Most of them are aware that since the end of the war there has been a gradual shift in their business. Sales of soft goods have gained less than sales of heavy lines. Right, after the war, this heavy goods increase was gravy for the big retailers. Profits were good; displays of scarce heavy merchandise brought the customers into the stores.

Now that the market is beginning to fill up on most heavy goods, the story is a little different. Recently department stores complained bitterly that they were making no money in their radio departments; some stores were ready to throw out these departments because they were in the red. They found they were getting a 24% markon



### Beer Basket

The cola influence on beer merchandising has asserted itself in the carry-home basket for beer. It's a convenient package for the housewife who would never think of lugging a 24-bottle case home. And it's easier for supermarket checkout counters to handle than separate bottles. Two West Coast brewers are testing the package: Pacific Brewing & Malting (Wieland's) in San Francisco; Acme Brewing in Los Angeles.







# PROTECT your business against these Five Major Hazards with One Policy







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policies and bonds . . . some perhaps overlapping or so widely separated as to leave dangerous loopholes.

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EVERY TYPE OF ADHESIVE FOR EVERY INDUSTRIAL USE

on radios, when they needed at least 36% to show a profit.

• Appliances Off, Too—Now the stores are beginning to face a similar situation in their home-appliance departments. With sales leveling off and with warehousing and handling expenses rising, costs are increasing the size of their bite into profit margins. The stores are facing, too, the problem of servicing home appliances already sold to customers.

A possible answer to the problems of mounting expense in the radio and home-appliance departments might also be found in cooperation along Chargaplate lines. In time, groups of department stores could set up joint repair and maintenance divisions.

• Another Way Out—There is, of course, another answer to the growing problem of making a profit on sales of home appliances. Department stores could act just as sales agents for the big branded appliance manufacturers. This would: (1) reduce display space needed to that required by floor models only; (2) cut out the present costly practice of warehousing stocks of home appliances; and (3) reduce costs of delivering these appliances to their customers.

Big appliance manufacturers would carry the stocks, make deliveries to the department store's customer direct, and maintain and service the appliances.

# Read Your Brand Rating In New Research Cards

The "quiz game" is turning up in a form that may help you do a better job of selling your products. Cornelius Du-Bois & Co., Inc., of New York, market and opinion researchers, last week gave a preview of how their new Brand Rating Service works for advertisers.

• Stack the Cards—The interviewer carries a kit—it looks something like a parlor game. He gives the person he is interviewing a set of cards; each card carries the name of a brand in the particular category under study. The "quizzee" sorts the cards in four stacks across the top of the Brand Name Quiz Board. The stacks show whether he has bought a brand recently, has ever used it, has heard of it but hasn't used it, or has never heard of it.

Then he re-sorts the cards according to the way he rates the brands.

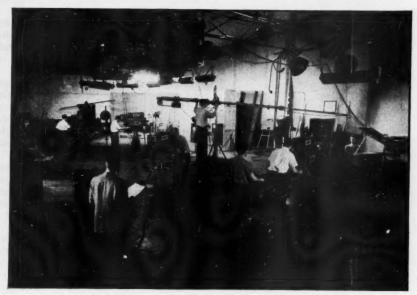
• A Lot of Brands at Once—The beauty of this system, DuBois thinks, is that the card stacks give you a definite answer. Even more important, you catch in a single interview all the prospective buyer's angles on 80 to 100 different brands.

The subscriber to the service gets a detailed analysis of his brand's standing—and angles his advertising accordingly.

### FINANCE



OPENING NEW STATIONS, such as ABC's WJZ-TV in New York, and buying . . .



COSTLY EQUIPMENT, such as this in an NBC studio, make television a . . .

# Vast Financing Problem

Growth of video will be much more expensive than was radio's. Far larger initial investment required, and operating costs are high. Capital markets will be called on for funds.

America is dotted with radio stations that started on a shoestring, grew with plowed-back earnings, and now turn in a tidy profit.

A far different future lies ahead for television. It's going to blanket the nation, all right—this year's vigorous growth proves that. But in spreading, television is going to need millions upon millions of dollars of capital. Some of this will come from the big money

markets like Wall Street. A lot of it will come from local pocketbooks—partly because of government curbs on chain ownership of television stations.

ownership of television stations.

• A Wait for Profits—To attract this heavy financing, television can't dangle the hope of quick profits before investors' eyes. Too many big development problems must be licked first.

American Broadcasting Co.-which went on the air last week with its first

television station, WJZ-TV, New York—has laid out video's financial facts of life. To guide would-be ABC affiliates, the network's engineers made these estimates of what it costs to start a television station (figures don't include land and buildings):

Class 1 stations—\$125,000. Such outlets will just about "live off the network." They'll employ only an engineer and an operator.

Class 2 stations—\$220,000. These 500-watt stations will use network programs and will originate some shows. They'll need an operating staff of 11 technicians.

Class 3 stations—\$300,000. They will be much like those of Class 2 in programing, but they will have more power—5,000 watts.

Class 4 stations—\$500,000. These will be 5,000-watters, too, but they will originate a great part of their own material. They'll need 29 operating technicians.

You can add a fifth class—the wholly owned stations that networks now are setting up. Only the networks know what such stations cost. But National Broadcasting Co. recently gave a hint: "A typical NBC television station will cost at least \$1-million."

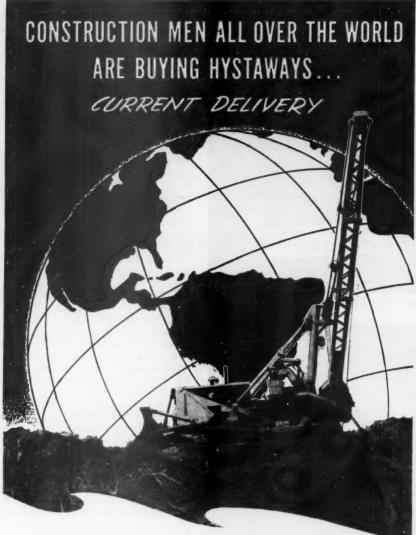
• Comparison—Contrast those costs with what it takes to set up a regular AM broadcasting station (even at today's prices): ABC engineers figure you can build a 250-watt local outlet, using mostly network stuff, for \$8,500. You can start a 5,000-watter comparable to a Class 3 television station for \$40,000; or you can set up a big 50,000-watt station, originating much of its own material, for \$200,000.

• Breakdown—Where does all the television money go? Here's the answer the ABC experts give for a Class 3 station:

Transmitter	\$85,000
Antenna	
Monitoring equipment	8,000
Televising, sound, and film	
equipment	24,000
Relay line, studio to transmit-	
ter	12,000
Portable equipment	48,000
Installation costs	40,000
Portable lighting equipment	3,000
Reserve for contingencies	61,000

That makes a total of \$294,000. When you lay the money on the line, you buy more than a fully equipped station: You acquire the headache of trying to make your revenue cover operating costs. Few if any telecasters are able to turn the trick, so far. One big station reports that its operating loss last year added up to \$750,000; it expects its 1948 loss to be "considerably higher." Another major operator looks forward to video deficits of "millions" annually for the next several years.

• Production Costs-Program and production costs are terrific-if telecasters



Handling 5,000-lb. sections of pipe in Utah...Starting openings for slope mines in Pennsylvania ... Working on an earth-fill dam in South Africa... Cutting pole handling costs 75% in Kansas... Yarding logs in New Mexico... Constructing a pier in Trinidad, B.W.I.... Unloading steel rail from a gondola car in Michigan.

Hystaway is a combination dragline, clamshell and crane machine for mounting on "Caterpillar" D8, D7 and D6 track-type tractors, new or used. Can be removed in one hour, installed again in two hours.

Construction men say that Hystaway is the most significant development in tractor equipment in years. It is a matter of record that more than 500 of these earthmover-crane units are cutting job schedules and construction costs around the globe... Write for literature.

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are to keep up the public interest that has carried receiving set sales along at such a merry clip this year. The major broadcasters, at least, seem to be sold on the need for topnotch shows during the unprofitable development era. Here's how Columbia Broadcasting System's president, Frank Stanton, puts it: "By putting primary emphasis on the production of good television programs, Columbia can help the medium achieve a sound economic status more rapidly than would otherwise be possible."

When will television reach such a "sound economic status"? There are as many answers as there are video executives in midtown Manhattan. ABC gave a cagey answer last spring. In its prospectus for a 500,000-share issue of new stock to the public (BW-May29'48, p88), ABC warned buyers: "Among the important factors in the decision as to when dividends will be paid are the rapidity with which televison can be put on a profitable basis, and the amount of the company's requirements for capital expenditures."

• Wire Costs—The wire costs alone for

• Wire Costs—The wire costs alone for a network operation are a big item. Television needs coaxial cables (or a vast system of relays); these cost a lot of money to build.

American Telephone & Telegraph Co. is laying the most extensive television-transmission cable network. It charges \$35 a month per airline mile for the use of a cable circuit for eight consecutive hours a day. For four hours daily, the monthly charge is \$25 a month per mile. For occasional use, the charge is \$1 per airline mile per hour. These charges are for picture transmission only; the accompanying sound must go on another wire at a further charge.

Here's how it works out: The Video charge for four-hours-a-day use of the New York-Boston cable (199 airline miles) is \$4,975 per month. Fees for the sound wire, plus charges for "loops" and other services at each end, bring the total bill to pretty close to \$9,000 a month.

• Revenue Picture—On the revenue side of the operating picture, television's airtime charges for advertising are rising. Rates on NBC's New York station, WNBT, will be kicked up 33% on Oct. 1. They'll be: \$250 for five minutes; \$400 for 14 minutes; \$600 for a half hour; \$1,000 for an hour. CBS plans similar rates for its New York station. ABC started out with the \$1,000-anhour rate on WJZ-TV. There are a lot of fees that go with these basic charges.

In other areas, with fewer sets, stations can't get such rates for time. But they make no bones about saying that rates will go up as set concentration

• Gamble-Some optimists think that a few stations may reach the break-even



# FIBERGLAS\* ...that people may fly in quiet and comfort

Despite the roar of four powerful engines, passengers aboard TWA's new trans-Atlantic "Constellation 749's" chat in easy, normal tones. And despite sub-zero weather, three miles up, they enjoy pleasantly conditioned cabin temperatures.

To provide these relaxing surroundings, Fiberglas Aircraft Insulations are installed for sound treatment and temperature control—in cabin walls, on ducts and many specialized pieces of equipment.

Lost in downy blankets of Superfine Fiberglas are those high-frequency sound waves that punish the ears and cause fatigue. And heat is stopped in its attempt to force its way through the millions of air spaces of the insulation.

This incredibly lightweight, resilient, non-settling insulation is made of fibers of glass, each so fine that it

scarcely can be seen with the naked eye. And glass won't burn, rot, decay or corrode; it is chemically stable, resisting the action of petroleum products and common acids. Add negligible moisture pickup to these properties and you have the reasons for the outstanding performance of Fiberglas Insulations in military, commercial and private aircraft, where every pound of deadweight saved means increased payload or flying time.

The superior qualities of these and other forms of Fiberglas thermal and econtricing insulations are partial.

The superior qualities of these and other forms of Fiberglas thermal and acoustical insulations are paying dividends across the board in industry—undoubtedly they can in yours. Why not inquire?...Owens-Corning Fiberglas Corporation, Dept. 803, Toledo 1, Ohio. Branches in principal cities.

In Canada: Fiberglas Canada Ltd., Toronto, Ontario.

Photo courtesy TWA. "Constellations" built by Lockheed Aircraft Corporation for Trans World Airline,

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From the day you lay ORANGEBURG PIPE, its time-defying material resists cracks, breaks, corrosion. TAPERWELD\* Couplings hold fast, repel roots, prevents leaks.

That's why Orangeburg non-perforated lasts a lifetime for House-to-Sewer, Septic Tank, Conductor or Irrigation Lines. For Septic Tank Beds, Foundation Drains, Land Drainage, use the perforated type. Long lengths light in weight make Orangeburg easy and economical to install. And the first cost is the last cost for this permanent pipe. Orangeburg saves you money. Be sure to ask for it by name. Orangeburg Manufacturing Co., Inc., Orangeburg, N. Y.

\*Reg. U. S. Pat. Off.

RANGEBURG THE ROOT-PROOF PIPE

point next year. Most people in the business don't think so. And they figure it may be five years before the industry as a whole is in the black.

But television people are gambling that once the black ink starts to flow it will write big profit figures. They are rushing into television as fast as they can. The number of stations operating has risen from 17 to more than 30 already this year. By the end of 1948, there'll be at least 60.

• Big Plans-The three largest radio networks-NBC, CBS, and ABC-will have sunk more than \$30-million in television facilities by the end of this year. And they are making active plans for throwing in a lot more. But they won't have the network field to themselves; DuMont, a television network pioneer, and Mutual Broadcasting System are planning broad expansion, too. Here's what NBC, CBS, ABC have

National Broadcasting. Backed by the resources of its parent, Radio Corp. of America, NBC seems intent on keeping the topdrawer position in television that it has in radio. It owns and runs two stations-in New York and Washington. By the end of 1948, it expects to get three other wholly owned stations going-in Cleveland, Chicago, and Holly-

wood.

NBC is looking forward to a 30-station network by the end of the year. It has, or soon will have, affiliation agreements with outlets in Boston, Philadelphia, Schenectady (N.Y.), Baltimore, and Richmond (Va.) that call for exchange of programs. It plans to furnish filmed versions of its programs to stations in Buffalo, Cincinnati, St. Paul, Detroit, Salt Lake City, Denver, St. Louis, Milwaukee, Providence, Louisville, Ft. Worth, and Atlanta.

Columbia Broadcasting. CBS now operates only one station-in New York. It has applied to Federal Communications Commission to build similar stations in Boston, Chicago, and San Francisco. It would also like to buy good-sized pieces of stations that two newspapers-Los Angeles Times and Washington (D. C.) Post-are setting up in their cities.

And CBS expects to sign affiliation pacts soon with stations in Philadelphia, Baltimore, Detroit, Cleveland, Toledo, and Atlanta.

American Broadcasting. With its first station now on the air, ABC is ready to set up three more wholly owned stations-in Chicago, Los Angeles, and San Francisco. Plans call for their completion this year. Affiliations arranged or in the works will tie in Boston, Baltimore, Louisville, St. Petersburg-Tampa, Minneapolis, Ft. Worth, and San

 Stumbling Block—These plans would almost certainly be still bigger if it

Diego.

weren't for an FCC rule that no television broadcaster can own or control more than five video stations. With the big chunks of money that it takes to start a station, it's a good bet that the chain operators would hasten station development by putting up capital for local stations—if the FCC would allow it.

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Of course, there's a way the networks could throw in a lot of money for local stations: They might theoretically buy a minority interest in them. But nobody seems to be real sure where the FCC will draw the line as to how large an interest gives "control." Maybe the commission will settle for the arithmetical 49%—and maybe it won't.

One thing that's said to be in the back of network men's minds: Maybe a change of administration in Washington will bring a change in FCC membership—or at least a more liberal rule on network ownership of station outlets.

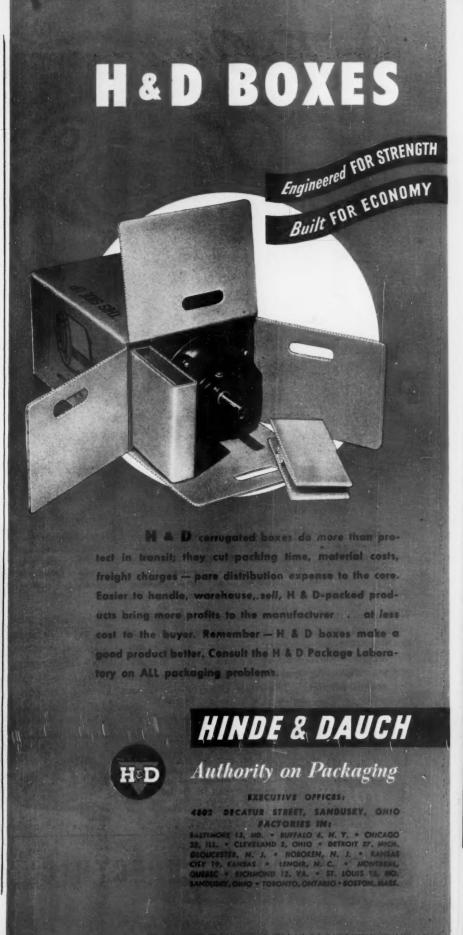
• Sources of Money—Thus far, NBC and CBS have been able to finance their plunge into television with their own funds. Younger, smaller ABC had to go to the public with the 500,000-share stock issue which netted \$4-million; it also got a \$5-million long-term loan from Prudential Life Insurance Co. of America about the same time. (Not all of the \$9-million went for television; some was used to pay off bank loans.)

Television people wouldn't be surprised to see ABC go to the capital market again for more television funds before its video ventures pay their own way. The recent election of financier Owen D. Young (picture, below) to



AN ELDER STATESMAN of radio finance, Owen D. Young, has joined the board of directors of American Broadcasting Co. Wall Street thinks this may mean another big ABC financing operation is coming

87



## HOW Top Quality cords



BUILD Juantity

The Totline Corporation, pricing its new Tot-Lite lamps to retail at about \$1.98, desired a real selling story of quality. To tell this story well, General Electric Flamenol\* cord sets and the well-known General Electric Flamenol tag were selected.

BECAUSE General Electric Flamenol cord sets are made with a durable, easy-to-clean thermoplastic insulation and molded-on plastic plug, customers have learned to look for them on products they buy. Often, they supply the sales "clincher" with a critical shopper.

BECAUSE Flamenol cord sets bear the worldfamous General Electric name on the eye-catching Flamenol tag, they are an added selling point with shoppers. They help to give products the extra mark of high quality so important in competitive selling.

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GENERAL

the ABC directorate was taken widely as a hint that the network may be planning a major financial operation. Young is honorary chairman of General Electric Co., was a founder of Radio Corp. of America.

It wouldn't surprise the trade, either, if CBS does some new financing next year-providing the stock market is favorable.

Its earnings haven't been spectacular lately-due in part to the slump in its important phonograph record business. While most big industrial companies were setting profit records (BW-Jul.31 '48,p19), CBS's net for the first half year slipped to \$2.8-million from \$2.9-

million a year earlier.

• Investment Trust-Whatever the big networks do about financing, it's obvious that there's going to be a hefty demand all over the country for television money. And at least some financial people are getting ready to supply it from the organized capital market: A group of Chicago investment dealers have just set up a new investment company, Television Fund, Inc.; its job will be to finance video manufacturers and station operators.



### New Bosch Chairman

E. Perry Holder was named to head a new directorate of American Bosch Corp. last week in a top-level shakeup that seated seven new directors and added two new ones to the board. The changeover came as a result of the purchase (for \$6,044,749) of 535,882 shares of American Bosch's Class B common stock by Amra Corp., a privately owned company. Amra bought the Bosch stock from the Office of Alien Property, which has held it since 1942, under the Alien Property Act. These shares represent about 77 percent of American Bosch's outstanding stock.



**HEAT PROCESSING** of painted metal fixtures is just one of the many functions which GAS performs in modern manufacturing. But it's an important function because modern Gas Equipment can be installed right in the conveyor line for continuous production.

That's the way The Edwards Manufacturing Company uses GAS in its steel furniture manufacturing plant at Cincinnati, Ohio. Company executives investigated many modern productioneering methods and from this study developed a conveyor system to carry the material through washers, dryers, painting chambers, and ovens.

In this system the productive flames of GAS supply heat for washers, dryers, and finishing ovens. Flexible GAS is so readily controlled that it can be adjusted to any required temperature and used for every heating requirement in this production system.

Plant Manager Morgan Buford expresses his satisfaction with GAS—"The GAS Equipment has enabled us to streamline our operations so that our production-lines turn out the work with considerably lower expense for GAS than we anticipated."

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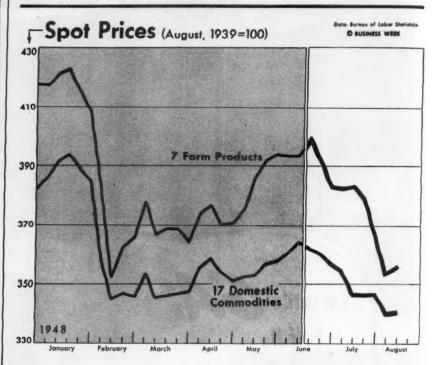


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## THE MARKETS



## New Commodity Patterns

Break in farm-product prices as big crops come on pulls down the indexes, masking an uptrend in industrial raw materials. Because of farm-price supports, general leveling off is foreseen.

Things have been moving fast in the commodity markets. New price patterns are beginning to shape up. You can now see some of the major trends that business will have to deal with in coming months.

• Boom's End—The boom is over for most farm commodities (chart, above). Meat still is out of sight. But the grains are down close to the government support levels. And the prospect of a bumper crop has knocked the cotton market back on its heels.

As a result, the Bureau of Labor Sta-

tistics index of spot prices of seven farm products has been dropping fast. It now stands just about level with the low point that it hit after the February break in the grain markets. Earlier this summer—before the latest decline started—it had recovered about two-thirds of its previous drop.

• Wheat Down—Wheat actually has been selling about 10¢ under the support level. The government doesn't guarantee grain prices directly. It provides support by offering to make non-recourse loans to farmers at 90% of parity price; the grain is the collateral. "Non-recourse" means that if the farmer doesn't want to pay back the money, he can keep the cash and the government will keep the wheat.

To qualify for a loan, wheat has to be properly stored. This year's enormous grain crops have put a terrific strain on storage facilities. During the peak of the crop movement, farmers have thrown a sizable amount of wheat on the market below the support price just to get it off their hands.

• Prices Slip-In Kansas City, for instance, the support price is \$2.24 a bu.

### Security Price Averages

	This Week		Month Ago	
Stocks				
Industrial				
Railroad.	48.2	48.0	48.9	43.2
Utility	70.7	70.5	71.4	76.0
Bonds				
Industrial	98.0	98.4	99.4	103.5
Railroad.	86.3	87.1	89.2	89.1
Utility	95.0	94.9	95.8	103.5

Data: Standard & Poor's Corp.

but wheat has sold there as low as \$2.14 in the past couple of weeks.

Cash corn at \$2.08 a bu. in Chicago still is a good way above the loan level. But that won't last. New-crop futures are well under \$1.50. The support price at Chicago will be around \$1.45.

Cotton at about 31¢ a lb. is right on the peg. There is a 6-million-bale carryover in sight for the end of next season. The trade estimates that perhaps 3-million bales will go under loan. • Strong Spots-The drop in farm prices has pulled down the broader BLS index of 17 domestic commodity prices. But that dramatic spill can be deceptive. Some of the nonfarm components of the index are stronger than ever.

Nonferrous metals, for instance, have

all gone up in the past few weeks. Copper and lead rose 2¢ a lb. Zinc went up 3¢. Some of the experts thought business might slow down for a while after these jumps. But the trade reports that orders have been coming in briskly at the new prices.

• Flattening Out-If the government were not pegging farm prices, you could expect more declines in the two BLS indexes. As it is, you can't figure on much more of a drop until meat prices start to wobble. That probably won't be until sometime in 1949.

What you can figure on is a fairly stable sidewise trend in spot prices for the next few months. And that trend will gradually work its way through to the wholesale markets.

### How Recent Bond Offerings Have Acted

Amou Offer (in mil	ring Issue	Initial Price	Offering Yield	Recent Price*	Market Vield
\$15	Cincinnati Gas & Elec. 27s, 1978 (1)	101.00	2.82%	99.25	2.87%
28	South. Nat. Gas 3s, 1968 (3)	100.75	2.95	100.00	3.00
90	New York Telephone 3s, 1981 (1)	101.12	2.94	100.00	3.00
30	Louisville & Nashville 34s, 2003 (1)	100.00	3.75	95.50	3.95
10	North'n States Power 3s, 1978 (2)	101.59	2.92	100.25	2.98
55	New Jersey Bell Tel. 3\forall s, 1988 (1)	103.12	2.99	101.75	3.05
13	Nat. Fuel Gas 3s, 1973 (2)	101.77	2.90	100.50	2.97
80	Westinghouse Elec. 2.65s, 1973 (2)	101.00	2.60	100.12	2.64
14	Equitable Gas 31, 1973 (3)	100.84	3.20	100.75	3.21
11	New England Power 3s, 1978 (2)	100.99	2.95	100.00	3.00
50	Commonwealth Edison 3s, 1978 (1)	100.99	2.95	101.00	2.95

\* Bid price. (1) Moody rating: Aaa. (2) Moody rating: Aa. (3) Moody rating: A.

The volume of new financing has been running pretty close to levels of the bull-market days of 1946. But the corporate new-issues market and the underwriting trade generally haven't been doing so well as the volume of the market would indicate. Most underwriters have been wearing a dour look in recent months.

· Competition Hurts-For one thing, direct seller-to-buyer deals (BW-Jun.26 '48,p89) continue to soak up well over 40% of all new corporate financing. So far this year, close to \$1.5-billion of new issues have taken this route to bypass

the public offering market.

This competition has hurt the financial district. Normally a large part of the Street's living comes from the commissions it gets from (1) underwriting operations, and (2) open-market trading in new issues after they have been dis-

• Mostly Bonds-Another thing that has hurt: Preferred and common stock financing deals have been conspicuously scarce. Hardly 20% of all 1948's flood of new corporate flotations has involved the sale of equities. So, many an underwriter has been operating on pretty much of a starvation diet. That's be-cause equity deals normally provide much better commission income than the high-grade bond offerings that have lately been the market's mainstay.

• Faulty Pricing-Some of the troubles plaguing the underwriting trade lie squarely at its own door. In their anxiety to win new-issues business from competing underwriters, some buying syndicates have shown faulty price judgment. Of the recent bond offerings, most are now selling in the open market at discounts under their original offering price. In some cases, such losses are as much as 14 to 4½ points (table, above).

As yet, this tendency to overbid hasn't involved the Street in any truly sour deals-such as it got stuck with in 1945 and 1946. But pricing mistakes have definitely cut underwriting profit margins. Underwriters have had to lower the original offering price of many a new issue at the last minute, to make sure of better distribution later on. Several times, finding themselves stuck with a slow seller, they have had to cut prices to keep their shelves free of hefty amounts of unsold new issues.

• Preferred Down, Too-Underwriters have been overreaching on some preferred issues, too. Consumer Power's new \$4.52 preferred, for example, early this week was selling in the market at only \$98.50 a share; original offering price was \$102.72.



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## LABOR



THE WAY A DAY'S RECEIPTS ARE TRANSFERRED from in-plant bookie to syndicate agent is demonstrated in this posed picture

## How Much Do Gamblers Take from Your Plant?

Nearly every industry has employees running gambling operations on side. Some do it on own; some work for big-time racketeers. Aside from moral question, it steals from productivity.

Do you know that your plant may be a branch office of an illegal industry that has an annual take of over \$1-billion? Do you know that this industry-within-an-industry — gambling — steals production time that you pay wages for?

• Survey—It's impossible to calculate what the production losses from in-plant gambling amount to. But a two-month study by Business Week of in-plant gambling in seven manufacturing centers shows the following:

(1) On the average, one out of every 250 employees of industry is also employed by a gambling syndicate as an inplant agent.

(2) The illegal income of these inplant agents varied, in cases studied, from 50% to 1,700% of their legitimate wages. In a few cases, self-employed gambling agents' incomes from the business went as high as fifty times their weekly wages.

(3) For every job opening as an agent, there are a dozen applicants from among workers regularly employed in the plant.

(4) The risk of being seriously punished if caught is relatively slight.

(5) In plants of 1,000 employees or more, an average of 10% of production workers consistently gamble on the job. Around 50% of all employees in these plants gamble at some time or other.

(6) In plants of less than 1,000 employees, almost nobody gambles or almost everybody gambles.

(7) It's nearly impossible for the lower echelons of plant supervision to be unaware that gambling is going on.

(8) It's not unusual to find foremen or assistant foremen acting as gambling agents, or overlooking the activities of in-plant agents in return for a "cut."

(9) In-plant gambling is a much more highly organized business since the end of the war. National syndicates are involved as never before.

(10) The principal forms of in-plant gambling are: first, numbers (sometimes called policy betting); second, handbook (horse-race betting); third, football and baseball pools (either blind lottery betting on high scores or team selections).

(11) An open-hearth helper in an eastern steel mill won a \$40,000 prize last winter for holding the winning ticket in a horse race lottery. This was the largest "return to a customer" from

in-plant gambling that Business Week was able to find.

(12) Union shop stewards have been found acting as gambling agents, but in no case was the activity found to be sanctioned by the union.

(13) Few unions will protest company action against in-plant gambling; some are prepared to cooperate with employers in stamping it out.

(14) But, there have been a few strikes to protest the discharge of men discovered by management to be gambling agents.

(15) Management can put an end to gambling on the job.

• Gambling Syndicate—Business Week was led to undertake its survey by the nearly successful attempt on the life of Walter P. Reuther, president of C.I.O.'s United Auto Workers. In their search for a murder motive, Detroit police questioned gambling syndicate personnel whose in-plant operations were being impeded at Reuther's direction.

It was an entirely logical field for the police investigation. It is still possible that it will yield the answer to the question: Who shot Walter Reuther?

• Union Position—U.A.W., as well as other large unions in industrial centers where in-plant gambling flourishes, has more than a moral revulsion against the practice. It is always possible that some of its representatives may be corrupted by the gamblers, and induced to be-



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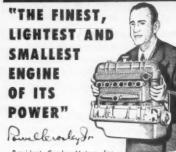
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come agents of the syndicate. This would naturally involve the union organization, to its discredit, in the gambling operation.

A shop steward, for example, free to leave his own work place on union business and circulate around his department, would make an ideal in-plant agent. There is a premium on mobility in such jobs.

• Wifely Protest - Another reason unions take a dim view of on-the-job gambling is that the union sometimes becomes the alibi for a skimpy pay envelope. For example: A wage earner takes home his week's wages from which he has had to pay out his week's gambling losses. He tells his worried wife that the difference between what she expected and what she got went for a special union assessment.

By and large, unionism and in-plant. gambling don't mix well. And Reuther, at the time he was shot, standing over the refrigerator talking with his wife in his kitchen, was one of a number of labor leaders moving to do something

• Survey-Business Week reporters in Detroit, Cleveland, Akron, Buffalo, Pittsburgh, Chicago, and San Francisco investigated in-plant gambling in their area. For the most part, they were able to get key people to talk frankly-on a confidential basis.

They covered policemen assigned to racket squads, officials in district and county attorneys' offices, chiefs of plantprotection forces, and plant management. In some cases they even got 'policy" and handbook operators to talk openly.

Here is a summary of the findings:

#### I. Detroit

About \$20-million of the \$75-million a year spent for gambling in Detroit comes out of the auto plants. Of this, around 50% goes for handbooks; 30% for numbers; 20% for baseball pools. Actually, more plant employees gamble on numbers than on horses, but it comes to less in dollar totals (the amounts bet on numbers are smaller).

Most of the numbers bets range between 10¢ and 50¢. This gambling form started with Negro employees, but today at least as many white workers are regular numbers players. It's not unusual for a player to buy 10 or 15 numbers slips a day.

· Writers-All bets are booked by regular "writers," almost all of whom are chosen by syndicate operators outside the plant. A few, however, are independent of the syndicates and are usually financed by some local tavern keeper or racketeer.

The writers for the various gambling enterprises do their writing inside the plant-or just inside or outside the gates before the turn of a shift. For the most part, they have a regular stand where they can be found at certain hours and the bettors contact them there.

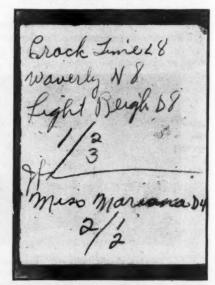
• Collectors-Numbers writers get 25% of the bet as their commission. The collectors, who pick up their slips and deliver them to syndicate headquarters, get 10%. The horse race bookers get 10%

A large amount of the bet money is turned over to collectors during plant working hours. There are various methods of doing this. Among the most favored are: (1) the use of truck drivers who come in and out of plants on regular schedules; (2) wrapping money and slips together and dropping them from plant windows, at a prearranged time, to the collector who waits on the sidewalk below; (3) handing the material to some part-time worker (such as a cafeteria employee) who leaves the plant earlier than the regular shift; (4) delivering it to some collector outside the gate at the lunch hour.

The writer does not know who runs the racket; his only contact with the syndicate is the collector.

• How Bets Are Made-Payoffs are made the day after bets are taken. The bettors no longer get any receipt or record of their bets from the writer. Formerly they received a carbon copy of their written bet, but these carbons are evidence in court. Since the Reuther shooting all operations are conducted with greater caution.

Different syndicates pay off on different numbers. The most common determinant of the numbers winner is the Detroit clearing house figures on bank



BET RECORD initialed by a bookie at a big Detroit auto plant. Letters and numbers beside horses' names indicate track and race. The figure to left of long dash means number of dollars bet; numbers to right (1, 2, 3) mean win, place, or show

clearings, which are published daily. Next in importance are the winning mutuel odds in three specified races at a specified track. While the Detroit track is running, for example, the winning number in one large syndicate is the first number to the left of the decimal point in the official win odds in the first, third, and fifth races.

• Extent—There are few plants in Detroit employing 100 or more which do not have some kind of organized gambling. A plant of 1,000 employees will have three or four numbers writers, one

or two handbook writers.

While plant management frowns on gambling, it does not encourage the police to come in and make arrests on company property. What arrests are made usually result from leads the law gets from police stool pigeons. Most plants summarily fire an employee arrested for gambling.

On the average, the police arrest one or two employees a week in a fair-sized plant. Generally, the men arrested get charged only with a misdemeanor and

pay \$25 fines.

• Two Cases—Few of the cases get on the record in such a way that plant names are made public. But sometimes they do. Among the most notable of such cases are two which recently occurred at Kaiser-Frazer and Ford Motor Co.

In the first, 22 Kaiser-Frazer workers—whose job classifications ranged from bootblack to inspector—were arrested inside the plant by county officers and

held on policy racket charges.

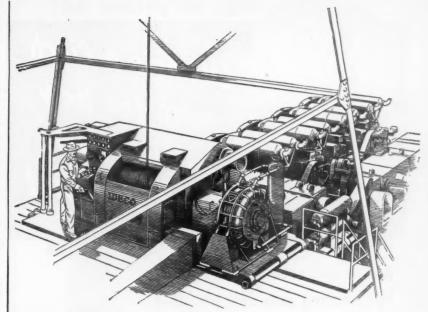
In the Ford case, police uncovered what they called a \$5-million ring operating in the River Rouge plant. This is what is known: A police trap resulted in the arrest of Edward Hester, a U.A.W. committeeman. Hester is accused of heading a numbers "bank" of his own. Police said that records found in his room at a small downtown hotel showed he had 180 writers working for him alone in the Rouge plant.

Hester was arrested when, police charge, he tried to bribe the Dearborn police chief, handing over to him \$100 as an "advance." Allegedly, Hester offered to pay \$5,000 a month to keep his agents at the Rouge free from police

harassment.

• Surprise to Management—The arrest of Hester was followed by some changes in Ford's middle-management echelon at the Rouge. No one has suggested that any Ford official was implicated. But two management men were fired. They had apparently gone to Dearborn police with information on Hester and had been admonished by the police not to tell anyone. They followed the instructions to the letter, with the result that the Hester revelations came as a surprise to Ford top management.

Supplementary investigations at the





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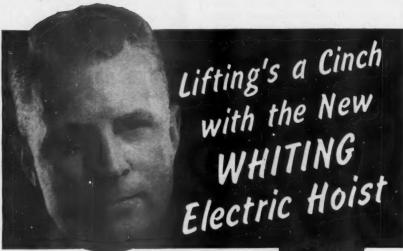
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Rouge revealed that Hester's alleged organization was by no means the only one operating within the plant. Detroit law enforcement officials in a position to know say there are at least 250 numbers writers in the Rouge plant. And what goes on in Ford, they say, is typical of other plants in the area.

#### II. Cleveland

There is daily gambling in practically every Cleveland plant with 200 or more employees. Since a series of recent police raids on handbook operators, onthe-job horse race betting is practically nonexistent. The principal gambling forms are numbers and, in the fall, football pools. The average numbers writer in a Cleveland plant books \$500 a week in bets (net, after deducting his 25% commission). Half of Cleveland's numbers writers have regular stands in industrial plants.

• Union Official Involved—There is only one known instance of a union official (a C.I.O. shop steward) being involved in numbers writing. He was employed at Westinghouse and was arrested in the plant. The company fired him. His union refused his appeal to take up the discharge as a grievance.

Another large Cleveland employer concluded that it would be too much trouble to stamp out plant gambling. He passed the word down the line that betting would be done without drawing employees from their work stations.

Top numbers-syndicate representatives insist there is no payoff to plant guards and protection men. Most plantprotection squads know about the gambling but have no orders to stop it. So they look the other way.

• Splitting Up Territories—The gambling syndicate operating in the Cleveland region has some connection with the national ring whose headquarters are in New York and Jersey City. Recently a Buffalo group tried to muscle in on the lush Youngstown area. For a while it looked as if an old-fashioned gang war might develop. But word from New York confirmed the Cleveland branch's territorial rights in Youngstown. So the Buffalo crowd quietly withdrew.

In most cases, top management men insist there's no gambling in their plants—and are apparently sincere in their assertion. Business Week's Cleveland correspondent, however, got from numbers operators the names of writers in those very plants and was able to talk with some of them directly.

• Union Action—One notable example exists of a local union president—a Negro—who really stopped gambling in the large metal-working plant where he was employed. He insisted that it was a disgrace to his race. But just as soon

as his term of office was finished, his members voted him out of the local's presidency.

#### III. Akron

A \$2-million-a-year numbers business flourishes in the city's three major rubber plants. Plant-protection officers con-

sider it an inevitable evil.

The most popular numbers tickets sell for 10¢ and 25¢. The win odds are now 400 for 1. Formerly the odds were 500 for 1. But an agreement among syndicates took prize money out of competition and brought the payoffs down. • Conservative Types—There have been no major scandals or exposes in Akron. The main reason seems to be that the Akron syndicates are careful and conservative, and keep raucous competition out of the plants. A zealous city police administration has probably helped force this mode of operation on the syndicates. Syndicate offices are kept outside the city limits.

The general practice of the United Rubber Workers (C.I.O.), Akron's key union, is to ask that a worker be given another chance if he is picked up for a first gambling offense. This is done through the grievance channels; if the request is refused, the union does not press the case. After appearing once in his behalf, the union won't do it a second time. During a recent six-month period, 56 vice squad arrests for numbers writing identified themselves as

rubber-plant employees.

• Phlegmatic-Akron is phlegmatic about in-plant gambling. Every employee knows-or can find out by asking the worker next to him-that he can make a bet either in the plant washroom or on plant elevators.

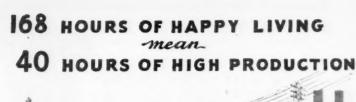
#### IV. Buffalo

The Buffalo area follows the Akron pattern except that baseball pools-and especially football pools-are a much bigger item. In one large plant alone, a season's football pool betting runs into several figures.

Still, numbers are popular in some plants. Last week Buffalo police arrested a filling station operator, and confiscated \$2,400 worth of lottery tickets he had in his car. Police claimed the man had been supplying subagents in industrial plants along the Niagara Frontier.

Buffalo, of all the cities investigated, still has large locker-room crap games. This was common nationally during the war. Some crap games in shipyards, for example, are known to have run without a halt for weeks. But lately this form of gambling has been of minor importance.

During the wartime manpower shortage, plant discipline suffered generally and more open and active forms of







## "Shoeing" the Iron Horse

Every railroad car wears at least four pairs of "shoes." Not the kind of shoes you wear, of course, but heavy-duty brake shoes, upon which depend the safety and efficiency of every train that rolls.

These rugged cast-iron shoes will never actually be called upon to clamp down on train wheels speeding at 160 miles per hour. But in the testing laboratories where Association of American Railroad standards are set, they must prove they're tough enough to do just that.

Yes, and every brake shoe must fit in any brake assembly built by any brake manufacturer, so that it can be readily replaced at any railroad shop or terminal.

Fixing the requirements for such a commonplace item of equipment is just one example of the testing and development activities which railroads carry on through the Association of American Railroads, their mutual agency for the improvement of all

railroading. Comparable standards are also set for other interchangeable parts, such as wheels, axles, trucks, draft gear, and safety devices.

This is part of the cooperative effort by which railroads, while competing with one another for business, make sure that every piece of their equipment meets strict specifications for strength, safety, and convenience.

It is this kind of cooperation for progress which helps provide America with the most economical, the safest, the most efficient mass transportation system in the world.



gambling flourished. It is estimated that many millions of gambling money that would normally flow to organized syndicates were expended during the war in such "spontaneous" ways. The return of stricter plant discipline has, for the most part, closed this outlet and the syndicates have the field largely to themselves.

#### V. Pittsburgh

Numbers is the biggest racket in Pittsburgh. A bet can be placed anywhere: in a plant, a taxicab, a movie theater, or at the corner newsstand. It's so easy to put down a bet that in-plant gambling is operated as a pure convenience to the bettors—not, as in other places, because a large plant makes a good cover for business.

• \$2-Million a Week—It is not unusual to see, across the street from three large manufacturing plants, a block-long line before "smoke shops" during the plant lunch hour. The line is made up of in-plant writers who are filing their slips with the neighborhood office of the syndicate. The estimated numbers take in the Pittsburgh area is over \$2-million a week.

Employers and the United Steelworkers (C.I.O.) are reported to make a practice of shutting their eyes to inplant betting. But the union maintains that it will support management penalties against employees who persist in writing tickets after being warned.

In many plants, guards have been in-

919.02 Checker 54.00 Silan 973.02 Total Pd. 1410.45 Par Mike 1437.43 Que Mike 2962.00 Profit END of Month. My char 1481.00 427.43 Ownersh. Out me— 1.043.57 The correct figure on the Profitio 2961.85 Royl.

PROFIT TAB of an independent pool run by three auto workers is jotted down on back of big Detroit company's stock requisition slip. It shows how much a gambling operator can make beyond his regular pay check structed to chase pickup men. The reason: Companies want to avoid the possibility of arrests at plant gates.

• Office Workers, Too—Of the seven cities studied by Business Week, Pittsburgh is reported to have the most numbers players among office workers. Practically every office with more than 20 employees has one person who either runs his own numbers book as a sideline or is a syndicate agent. Among the white collar people who do the most betting are those who work in city hall, in insurance offices, in public utility corporations, and in the home offices of steel companies.

#### VI. Chicago

Chicago was the most difficult city to investigate for in-plant gambling. Only a few scattered facts can be established. First, and most important, is that betting on the ponies appears to be more important and more prevalent than numbers., The explanation for this also explains why information in Chicago is hard to come by.

The syndicate is so powerful, so entrenched, and so efficient that it can, to a large extent, keep out cheap forms of gambling. The employee in a Chicago plant who wants to gamble on the job just can't make a dime or quarter bet. The best he is usually able to do is to find a fellow employee who will take

a horse and split a \$1 ticket.

• More Profitable—On such a basis, the gambling operation takes less hired manpower, is more easily controlled and supervised. The syndicate running such an organization can make it tough for the outside investigator to dredge up any facts.

It is known, however, that in almost any one of the metropolitan area's 5,000 sizable plants, it is possible to get down a bet on a horse. It's also easy to get directions to some card room or gambling house where 24-hours-a-day table games are conducted.

#### VII. San Francisco

Probably because of the traditions of its large Chinese population, San Francisco is a lottery town. Numbers and horses are distinctly secondary.

• In Name Only—Up until a short time ago, several weekly and monthly lotteries got the biggest play. These were variously known as the Teamsters, the Pressmen's, the Pressmen's Monthly, the Building Trades, and the M. & M.

Unions had nothing to do with them despite their names—which probably indicated the occupational origins of their founders. Thus, for example, the Teamsters was organized by a former teamster who started his lottery among truck drivers.

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at the flames. ¶ We got to thinking about this "genie in a bottle"—wondering whether the stored energy of gases-under-pressure couldn't be used in other ways. We found that it could, all right! ¶ On combat planes during the war, for instance,

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these lotteries were shut down periodically; but, miraculously, they started up again. The present city administration really went after them last November, and it's difficult to buy a lottery ticket in San Francisco today.

Bookmaking in San Francisco is also operating in low gear now-largely because of the heat generated by the "Bugsy" Siegel slaying of last summer and another gang killing which followed soon after.

• Little In Plants—All in all, there is probably less in-plant gambling in San Francisco presently than in any other major industrial city. Employers say it never was a big thing. They attribute this, in part, to the fact that draw poker is legal in California and provides a legitimate opportunity to work off the gambling urge.

In the waterfront trades—a large slice of the city's employment—crap shooting goes on all the time. The games become large at lunchtime and during lulls in cargo handling. One wisecracker maintains that a longshoreman has an innate distrust for anyone who wants to write something down, and will not place a bet on anything that can get further away from him than a set of dice.

#### VIII. Lessons

In New York City recently, the State Board of Mediation was involved in an effort to settle a strike where the sole issue was the discharge of the union (Teamsters) shop steward for booking bets. The strike protested the award of an arbitrator who had upheld the company's disciplinary action.

• Decision-The arbitrator noted in his award that "T. G. was employed for five or six years as a shop steward; that the factory superintendent spoke to the said employee on several occasions concerning gambling; that notices were posted warning the men that anyone caught gambling would be discharged; that the notices were torn off the bul-letin board; that G. was told specifically that the playing of cards, the shooting of crap, and the betting on horse races would have to stop; that G. did not stop the gambling; that on occasion G. walked around the plant with a Morning Telegraph and a scratch sheet in his pocket and that there were meetings of the men outside the D. M. department; that production was slowed down by the men in order to give them sufficient time to gamble; that production increased 20% to 25% since G.'s discharge.'

In sustaining the discharge the arbitrator held: "The arbitrator is not concerned with the morals of gambling, but he would be remiss in his duty if he did not point out that gambling under the circumstances in the company's plant seriously interfered with

production because the men diverted their attention partially from the job at hand..."

• Fight Was Worth It—The strike was eventually settled on the employer's terms; he reports that there isn't any more gambling in his plant. He is convinced that it cost him less to fight the issue through a walkout than to go on with the old practice. He says his experience has taught him that any employer can stop in-plant gambling if he is prepared to take a strong stand; that the police will cooperate; and that the community will give him its support.

 Management's Attitude—In the main, four different management approaches to in-plant gambling were encountered in Business Week's survey. They are:

(1) Some employers refuse to acknowledge that gambling goes on in their plants—even when directly confronted with evidence of its existence.

(2) Some employers recognize widespread in-plant gambling but are unwilling to do anything about it—either on the assumption that nothing effective can be done; that it doesn't really matter; that it's less trouble to put up with it; or that crackdowns would make their employees feel they're prudes.

(3) Some employers try to confine inplant gambling to the locker rooms during lunch and rest periods.

(4) Some employers wage a continuing fight to stamp out gambling in the

There have been some joint unionmanagement campaigns against on-thejob gambling. The employer who wants union support in an antigambling drive can usually get it; the New York Teamsters strike was an exceptional case.

Here is a fruitful field of union-management cooperation.



NUMBERS WRITER jots down bet in his book. Numbers at left are those chosen by bettor; next figure indicates amount bet



A mighty factor in farm and industrial prosperity of the Great Midwest is the Sugar Beet, which supplies one-fourth of all sugar consumed in the United States. A prime factor, too, in development and progress of the Beet Sugar industry is the Fast Freight Service of The Minneapolis & St. Louis Railway.

Minnesota and Iowa, served by the M. & St. L., plantabout 25,000 acres and harvest some 275,000 tons of Sugar Beets each year. Growers in the two states are paid more than \$3,500,000 annually for beets, which in one generation have become a major cash crop for Midwest farmers.

The M. & St. L. directly serves two large and modern refineries, at Chaska, Minnesota, and Mason City, Iowa, of the American Crystal Sugar Company, which also operates seven other plants, including two more in Minnesota, at East Grand Forks and Moorhead.

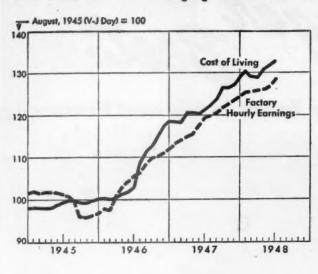
To sugar factories, the M. & St. L. delivers beets, coal, coke, fuel oil, limerock and paper, burlap and cotton cloth for bags. Each year, the railway hauls around 100,000 tons of beets. Outbound, the M. & St. L. moves hundreds of carloads of granulated sugar and of beet pulp for livestock food.

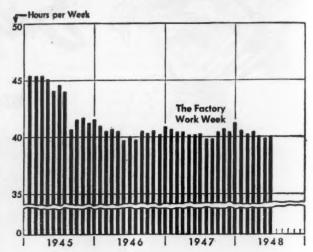
### Fast, Dependable Freight Service

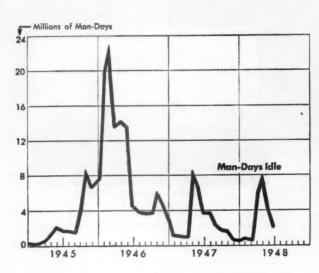
for Sugar Beet growers and manufacturers has an increasingly important place in the efficient transportation, which for 77 years the M. & St. L. has provided for Midwest agriculture and industry.

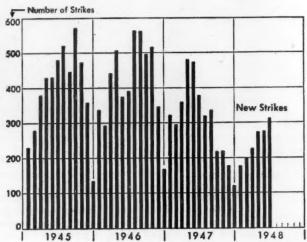


## A Quick Appraisal of the Labor Market's

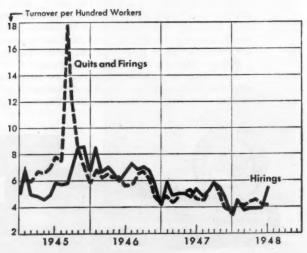












Data: Bureau of Labor Statistics

O BUSINESS WEER

## **Balance Sheet**

Second quarter roundup shows that race between wages and living costs is getting hotter. Strikes down from '47.

During the second quarter of 1948 both factory earnings and living costs took a sharp tilt upward. That's the most spectacular fact in Business Week's roundup of significant labor data for that period. Also noteworthy was the drop in man-days idle.

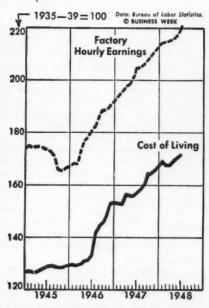
• Worker's Buying Power—The average

earnings rose 3¢ per hour from the prior three-month period (BW-May22'48, p105). And that's by no means the end. Earnings are sure to keep on going up as other recent third-round boosts take

Living costs have been rising, toomore than a point a month on the Bureau of Labor Statistics index. On a short-term basis, living costs are thus still out-running factory earnings.

Over the longer haul, though, it's another story. If you put wages and living costs on a 1935-39 base, you get

this picture:



• Strikes—It begins to look as if 1948 is following the 1946 and 1947 seasonal strike pattern-but on a smaller scale. New strikes are off a third from 1947 for the half-year; 4% fewer man-days of work have been lost.

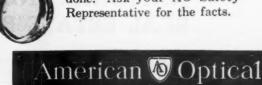
• The Labor Market-Factory jobs and average work-week figures are on the way back after spring strike losses. June showed a marked upsurge in hirings. However, summer vacations will keep the total below recent peaks until au-

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BUSINESS WEEK

## Hiring Curbs Hit

NLRB trial examiners say practices that keep nonunion workers out of jobs violate Taft-Hartley law.

National Labor Relations Board trial examiners handed down two important decisions this week. Both involve union attempts to get around the Taft-Hartley bar against closed-shop contracts. And in both the examiners held that it is an unfair labor practice to insist on any plan or continue any practice that discriminates against nonunion job applicants.

• I.T.U. Case-One trial examiner, Arthur Leff, found the International Typographical Union (A.F.L.) guilty of violating the T-H law. Reason: It insisted that employers agree to observe posted conditions of employ-ment; included in these conditions was one that a company should employ only printers who are already members of the union.

The examiner's report came in a case filed with NLRB nine months ago by the American Newspaper Publishers Assn. It rejected other A.N.P.A. charges, including one of union "featherbedding" practices.

This was the fifth time this year that

a trial examiner has found I.T.U. guilty of an unfair labor practice. NLRB hasn't acted on any of the examiners' reports yet. But the board's general counsel obtained a federal court injunction against I.T.U. last March, ordering the union to stop insisting on

its conditions of employment.

• Hiring-Hall Case—The second examiner's report, by Wallace E. Royster, held that demands for union-operated hiring-halls violate the T-H law. The examiner found the National Maritime Union and the American Radio Assn. (both C.I.O.) guilty of unfair labor practices: They refused to bargain with employers on a contract that wouldn't discriminate against nonunion seamen and radiomen.

The hiring-hall issue came up in a dispute between 33 Atlantic and Gulf Coast shipping companies and the maritime unions. A settlement was reached this week as an 80-day, T-H antistrike injunction neared an end. Hiring halls were kept, pending a court ruling on

their legality.

The Pictures-Acme-21, 36, 115; Ewing Galloway-26 (bot. right); Hilda Fisher Marx-109; Int. News -112; McGraw-Hill World News -30; Wide World-28, 87.

PAGE

## INTERNATIONAL OUTLOOK

BUSINESS WEEK AUGUST 21, 1948



Washington isn't worrying about the haggling in Paris over division of ECA funds (page 114). Top officials in ECA and the State Dept. expected some squabbles when they told the Organization for European Economic Cooperation to cut the pie itself (BW-Jul.31'48,p79).

So you can discount reports that ECA will make the decisions for OEEC.

Actually, ECA is adding to western Europe's responsibilities. It is turning over to OEEC the job of policing end use of American aid. (Originally, ECA planned to have a big staff in Europe to tackle this job.)

Washington's plan is to force OEEC to take on real POWER. The idea: This body must become the core for an eventual union of western Europe.

The U. S. should get about 700,000 tons of high-grade steel scrap out of Germany this year.

One deal has already been closed. Western Steel Corp. of New York bought 250,000 tons from the German National Railways (Reichsbahn). This is going to the Bethlehem Steel Co.

Dept. of Commerce agents in Germany think they have lined up another 440,000 tons.

Commerce says this scrap costs \$26 a ton at Bremerhaven. That comes to around \$35 or \$38 a ton laid down at an eastern U. S. port. Local scrap of the same grade is now selling in Philadelphia for about \$45 a ton.

The Anglo-American Joint Export-Import Agency (JEIA) takes the dollars from U. S. scrap buyers.

JEIA pays the German dealer 85% of the sale price in German Deutsche Marks. The other 15% is credited to him in a special dollar account.

This dollar account is used as an incentive. Against it the German to whom it is credited can buy: (1) special tools, such as acetylene torches for preparing scrap; (2) food and clothing for himself and his workers.

Overseas Tankship Corp., Caltex affiliate, has placed a \$20-million order with British shipbuilders.

It calls for three tankers of 16,500 tons and four of 12,000 tons.

The British builders are Hawthorn Leslie & Co., Furness Shipbuilding Co., and William Doxford & Sons.

British consumers—and cigarette manufacturers—are in for a smokeshy year.

From the current U. S. tobacco crop, they'll get only 70-million lb. of leaf (normal is 150-million lb.). The British Treasury figures on saving \$40-million. (Bigger sterling-area purchases won't offset this cut.)

But Britain undoubtedly will have to pay in other ways: (1) Some British tobacco manufacturers will have to shut down; (2) the cigarette black market will get a big boost; (3) the cigarette shortage will hurt industrial morale.

The French textile industry is threatened by a lack of raw cotton, especially Egyptian long staple.

Cairo has suddenly demanded dollars for its cotton. So the French government has had to cut off imports from Egypt.

This has hit a large section of the French industry, especially producers of luxury fabrics. Some plants are already down to 50% of capacity.

France's trouble with cotton has brought a new criticism of the European

## INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK AUGUST 21, 1948 Recovery Program: French industrialists say that ECA is pushing capital investment too hard and neglecting the supply of raw materials.

This contrasts sharply with complaints in the U. S. and Britain that capital goods are being underplayed.

The French argue this way: There's no use building new plants unless there's assurance of enough raw materials to operate them.

#### Moscow's economic blockade of Tito is getting tighter.

Trade between Czechoslovakia and Yugoslavia is being cut off. Russian troops in Austria have been halting Czech freight trains en route to Yugoslavia.

One result: Tito isn't so happy now that he has nationalized industrial properties once owned by west-Europeans. He has been dickering with interests in several countries (including Switzerland) to come back.

But Tito's big problem is fuel. He is getting only a dribble of Romanian oil. And so far the West hasn't come through with much. (The British have just sold Yugoslavia 19,000 tons as bait for a trade agreement.)

So Tito has put military guards around oil storage tanks. He's afraid of sabotage by Russian agents.

#### India should be producing its own dyestuffs before long.

That's the upshot of a deal about to be closed between Tata and Imperial Chemical Industries, Ltd.

The plan is for India to fill 90% of its dye requirements by the end of 10 years. At present the country spends \$12-million a year to import dyes for its textile industry.

The project dovetails with plans to double India's steel output. The steel program will boost output of coal tar byproducts used in making dyes.

#### Czechoslovakia is out to expand its business in India.

A nine-man technical mission from Prague has just completed a thorough tour of Indian industrial centers.

The Czechs couldn't promise to supply major capital goods for some time. But they did offer early delivery of machine tools, electrical goods, small generating units, textile machinery.

They also promised to send Czech industrial know-how.

#### The Czechs will probably do well in India. Here's why:

- (1) The Indians don't want to give too much business to U. S. and British firms. They fear that Anglo-American technical aid may some day threaten their independence.
- (2) The Czechs offered to take part payment for their services in Indian raw materials.

#### Australia's Labor government will forget its bank nationalization law.

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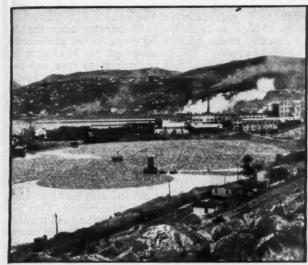
The Labor regime realizes that a High-Court decision against the banking measure is backed by a majority of electors.

Australian banks are now thinking of putting up a fight against the Banking Act of 1945. Under this law the commercial banks have to get an O.K. from Australia's central bank before making loans to industry.

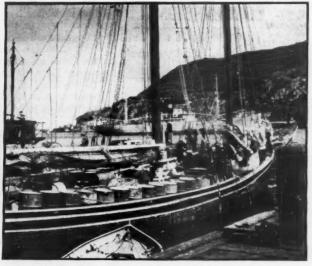
The court's decision against nationalization may also give a boost to U.S. investments in Australia. Several American firms had been holding up plans to see which way the wind would blow.

Contents convrighted under the ceneral convright on the Aus. 21, 1948, issue—Business Week, 330 W. 42nd St., New York, N. Y.

## BUSINESS ABROAD



NEWSPRINT MILL, with plenty of pulpwood, and . . .



FISHING VESSEL, with load of cod oil, earn U. S. dollars

## Newfoundland's Resources an Asset to Canada

Island area to become tenth province, bringing forest industries, mineral wealth, fisheries—and some headaches.

ST. JOHN'S, Newfoundland—Canada got a rich dowry when the inhabitants of this barren island voted to join the Dominion as its tenth province.

• Canada's Gains—The union will take several months to consummate. But this week Canada was looking forward to the precious U.S. dollars that Newfoundland's robust pulp and newsprint industry earns. And there are large, untapped mineral resources waiting to be exploited—especially in the uninhabited hinterland of Labrador in the north.

True, there will be big financial headaches, such as the extension of Canada's network of social services to cover Newfoundland. The Canadians figure that, for a while at least, they will be operating the province at an annual loss of \$15-million. But in the long run they stand to win. Here is why:

(1) Forest Wealth. Newfoundland industry will turn out 400,000 tons of newsprint and about 30,000 tons of dried sulphite woodpulp this year. The lion's share of the newsprint will go to help fill an apparently limitless U. S. demand.

Two British companies—Bowater's Newfoundland Pulp & Paper Mills, and Anglo-Newfoundland Development Co.—control the industry. Bowater's holds 11,230 sq. mi. of timber land with an estimated stand of 20-million cords of pulpwood. Bowater's is installing new equipment this fall which will make it the largest single newsprint mill in

the world. Exports this year will total \$23-million, at least three-quarters of which will go to the U.S.

(2) Mineral Wealth. Newfoundland's production of metal ores—particularly iron, lead, zinc, and copper—will be a welcome addition to Canada's resources. The Wabana Mine on Bell Island turned out 1.4-million tons of iron ore last year. About 600,000 tons went to Britain, the rest to smelters at Sydney, Nova Scotia. Wabana—a unique submarine mine—is worked by Dominion Steel & Coal Co.

Lead, zinc, and copper ores are produced at Buchans Mines, operated by Anglo-Newfoundland Development Co. Total output last year was 340,000 tons.

The richest mineral prize should come eventually from Labrador, a political dependency of Newfoundland adjacent to Quebec. Preliminary estimates indicate a minimum of 1.5-million tons of iron ore per vertical foct in Labrador. At work in the area now is Labrador Mining & Exploration Co.-backed by M. A. Hanna interests of Cleveland and Hollinger Consolidated Gold Mines Ltd. of Canada. The same two interests are backing another company-Hollinger North Shore Exploration Co.-which is operating just across the border in Quebec. The two companies have so far proved a total of 140-million tons of iron ore.

(3) Wealth from the Sea. Newfoundland's fisheries last year exported \$34-

million worth of fish and fish products. (There may be a headache for Canada here: The low-cost Newfoundland fisherman could put a crimp in the style of competitors in Canada's other Maritime Provinces.)

Important byproducts from the codfish—cod oil and cod liver oil—brought Newfoundland more than \$1.5-million last year. More than \$1-million of this came from the U.S.

(4) Strategic Location. Three U.S. Army bases and one U.S. Navy base bring in \$10-million a year in U.S. currency. (But Newfoundland's Gander Airport, the major stopping-off place for eight transatlantic airlines, is not a financial asset. Despite heavy traffic, Gander lost between \$500,000 and \$750,000 last year. Reason: Britain had to keep rental rates low to make sure the airlines didn't transfer their franchises to the southern route, by way of the Azores.)

• Currency Status—Not all of the U.S. money paid to Newfoundland will be new dollar credits for Canada. Newfoundland's banks and currency are already tied in with Ottawa; this funnels part of the money into the Dominion. And some of the U.S. dollars Newfoundland receives go to Canada and Britain to pay for imports from those countries.

The U.S. is Newfoundland's best customer. Exports to the States in the year ended March, 1947, totaled better than \$24.6-million. This compared with \$9.1-million to Canada; \$11.6-million to Britain. Newfoundland's imports for the same period were \$25.8-million from



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#### LANE-WELLS COMPANY

DIVIDEND NOTICE

The board of directors has declared a quarterly dividend of 40 cents per share on the common stock, payable September 15, 1948, to stockholders of record August 25, 1948.

WILLIAM A. MILLER, Secretary-Treasurer

### **Atlas Corporation**

Dividend on Common Stock

NOTICE 18 HEREBY GIVEN that a regular quarterly dividend of 40¢ per share has been declared on the Common Stock of Atlas Corporation, payable September 20, 1948, to holders of such stock of record at the close of business August 27, 1948.

WALTER A. PETERSON, Tressurer August 10, 1948. the U.S., \$43-million from Canada, and \$4.2-million from Britain.

• Lower Tariffs—This trade pattern is likely to change, but it's hard to say in which direction. One indication: Newfoundland's sky-high tariff wall, which brought the island 80% of its revenue, comes down to the more moderate Canadian level. This is good news for Canadian manufacturers and chain stores: They will now have easier access to the island. The lower rates will be some help to U. S. exporters, too, but not enough to offset Canadian competition.

The reduced tariffs may mean curtains for some of the local business interests that line St. John's Water Street. Over the years a closely knit group with headquarters here has built up control of the island's retailing, exporting, and some branches of manufacturing. Canadian companies are certain to bring back competition.

• Decision—For Newfoundlanders, the union with Canada settles a question that has been bothering them for more than 70 years: Should the island remain a separate British dominion, be joined to Canada, or be made independent?

The matter came to a head in 1933 when the island was in particularly dire financial straits. Then, Britain was called in to run things after the local government found it couldn't make payments on the \$90-million national debt.

A seven-man commission, headed by a British governor, took over the government, suspended dominion status, and slapped on a tough program of economy.

 Recovery—World War II finally put Newfoundland back on its feet again.
 The biggest boost was the Anglo-American trade of military bases for destroyers. Bases set up in Newfoundland brought thousands of jobs and million of U.S. dollars.

Then, since World War II, demand for the island's fish and wood pull has shot way up.

Along with recovery came the demand for a return to self government. This campaign got hot in 1946; it led to two referendums in June and July of this year. (The second was needed when the first failed to return a clear majority for any one proposition.) Union with Canada came out on top.

• Politics—Chief battlers in the campaign were the Confederationists, favoring union with Canada, and the Economic Unionists, boosting independence

The Economic Unionists plugged for an economic deal with the U.S., along with political independence. They proposed that Newfoundland and the U.S. join together economically for mutual benefit. The U.S. was to cut or throw out tariffs on fish to open the U.S. market to Newfoundland's fishermen. For their part, the Newfoundlanders would invite U.S. capital to build in the territory on a tax-free basis.

The hitch came when the Economic Unionists couldn't get Washington to give their scheme a boost. All kinds of methods were used to try to prove that the U.S. would consent to such a union. But the Newfoundland voters were for the most part unconvinced. They finally swung over to the Confederationists when the latter pointed out an easy-to-understand benefit of union with Canada—the baby bonus. Canada's social security laws call for payment of from \$5 to \$8 monthly for every child under 16. To Newfoundland fishermen and farmers, living on the brink of poverty, the thought was irresistible.

## Italian Traders Turn East

Western Europe can't supply Italy with required food and raw materials. So trade mission is trying to exchange finished goods for Russian grain, timber, oil. U. S. will referee any deal.

ROME-Last week an Italian trade mission arrived in Moscow to try to drum up some business. With it went the blessing of many U. S. and European economists-for this group has long been saying that recovery in Europe depends on more East-West trade.

• Ticklish Business—On paper the odds are against the Italians. The British and Swedes have made similar pilgrimages since the war (BW-May22'48,p118). Each came to trade terms of a sort. Yet each soon bogged down in endless haggling over details and prices.

And even if Russia decides to play ball with the Italians, the U. S. will

have to do some refereeing. True, resumption of East-West trade is supposed to be a big corollary to the Marshall Plan. But Washington will watch closely what Italy wants to export—it wouldn't do to have Italian goods, made with raw materials supplied by ECA, go to bolster Russia's war potential.

The Italian mission to Moscow wants to set up a \$100-million-a-year exchange of goods between the two countries. Italian textiles, industrial equipment, and citrus fruits will be offered for Russian grains, oil, and timber. If agreement is reached in these fields, the mission will take one more step—a dicker



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for Italian ships, locomotives, trucks, and agricultural equipment.

• U. S. Attitude—A clew to Washington's stand on deals like this came recently from James Zellerbach, ECA chief in Italy. Zellerbach said: "Such transactions will have to be studied case by case. I would say that if I were asked to O. K. an export of light trucks, I would do so. In the case of heavy trucks, I would recommend against it.

The Italians certainly hope the U.S. means what it says. They argue that only by weaving a strong trade pattern with eastern Europe can Italy ever hope to be anything but a problem to the Western Powers (i.e., American taxpayers). Small deals have already been made with Poland, Czechoslovakia, and Yugoslavia. But large-scale trade depends on Moscow.

• Examples-To show how the growth of Italian trade with the East would take a big load off the American taxpayer, Italians point to two examples:

POLISH COAL. Poland can supply Italy the better part of its coal needs whereas prewar suppliers—Britain and Germany—can't. Italy figures that for the first year of the Marshall Plan it will need 13-million tons. Most will have to be bought in the West-with dollars-unless a deal with Poland can be worked out. (Last year Italian industry could only get some 9-million

tons of coal, of which the U. S kicked in 80%.)

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RUMANIAN OIL. Rumania was alway Italy's best source of oil. But since the war the U.S.S.R. hasn't permitted this satellite to do much trading with the West. So Italy has been import ing oil-50% from the Middle East. 50% from the U. S .- mostly with do!

The Italians argue that eastern Eu rope is a tailor-made market for Italy's basic exports-manufactured goods. Rea son: Italian prices are low, can be met in food and raw materials.

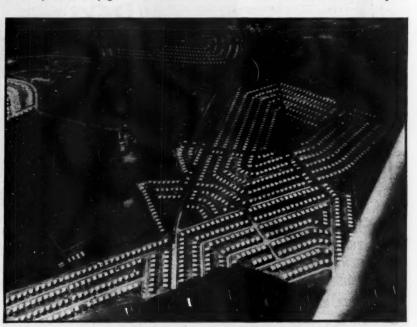
True, western Europe is also a big market for Italian consumer goods. And the Italians have been exploiting it to the limit. Italy's exports to this area have increased 79% over prewar.

• Trouble in the West-But what can western Europe offer Italy in return? Not enough food and raw materials to keep the Italian population and Italian industry satisfied. Italy's imports from western Europe have gone up only 32% since prewar.

The result is that Italy-despite rampant inflation and a low standard of living-is actually a creditor nation to western Europe. At the end of March, this area was in hock to Italy for \$150-

million.

Last April the Italian government was forced to call a halt to further exports



#### Houses for 50,000 Puerto Ricans

There's a low cost housing boom in Puerto Rico-and private builders are doing the job. This \$30-million project, insured by the Federal Housing Authority, is going up at Puerto Nuevo, just outside San Juan. To be completed by next January, the project will provide 7,000 single unit, five-room

homes, selling for \$4,000 each. The project is big enough to accommodate an estimated 50,000 Puerto Ricans. Long Construction Co., Charleston, S. C., is the builder. Long has similar projects mapped for three other Puerto Rican cities, and two smaller projects under way near San Juan.

on the cuff. Italy is now exporting largely on a barter basis. But Italian production figures dropped as a result. At the end of 1947, production was 83% of the prewar average. By April, 1948, the figure had dropped to 75%.

• Road to Moscow—The only road left open for Italy leads directly to Moscow. There the Kremlin holds the keys to

eastern Europe's larder.

Before the war, nearly a third of Italy's European imports came from eastern Europe (not including Germany). About a fourth of Italy's exports to Europe went there. Today Italy's volume of trade with eastern Eu-

rope is only a trickle.

The loss of Germany as trade partner is also a major blow. Prewar Germany took about 37% of Italy's exports to Europe, supplied almost 40% of Italy's imports from Europe. Today Italian exports to Germany are 1.7%—imports from Germany 4.3%—of 1938 values.

Western Europe hasn't been able to fill this vacuum. Up to now U. S. dollar aid programs have kept Italy afloat. But the dollars will go for naught, the Italians warn, if Italy's trade with the East

doesn't pan out.

### Japan Asks Australian Help in Wool Industry

MELBOURNE—Australia will probably turn down an invitation to go into partnership with Japan to produce and

export woolens.

• Capital Wanted—The invitation came from Kanematsu & Co., a large Japanese organization which formerly had branch offices in Australia. It asked Australian interests to invest capital in Japanese woolen mills, help direct production and exports, share in the profits on an equal partnership basis.

Kanematsu & Co. is believed to be serving as a front for the Japanese government. By this plan Tokyo apparently hoped to speed up deliveries of raw wool. Japanese imports haven't reached 3% of Japan's prewar intake.

• Unlikely Prospect—However, the proposed deal is not likely to shape up for

several reasons:

(1) Australia has no surplus equipment to invest in Japan's half-wrecked woolen industry. Nor are there dollars available to buy American spindles and

looms to install in Japan.

(2) The proposal that Australia act as Japan's middleman in the disposal of export surpluses is unrealistic, because Australia has no trading facilities outside its own markets.

(3) There will be strong British opposition to any deal tending to restore Japanese competition—even supervised

competition.

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turns out double-wall trays or cartons, telescope-type boxes automatically. Further information on this or other units in the General Mills line of packaging machinery (ice cream carton set-up and closing machines, Vacuflow powder fillers) is yours for the asking. Address Dept. 888, General Mills, Inc., 1620 Central Ave., Minneapolis 13, Minnesota.



### ECA'S LEDGER

#### Reports from Washington

Marshall Plan countries will report to Washington sometime this month on what they want to do with their counterpart funds. These funds are the local currencies—francs, pounds, etc.—set aside from the sale of ECA goods. The money will be used to supplement dollar aid with various internal, self-help programs.

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ECA rules definitely say how a portion of these funds must be used. At least 5% must be spent to supply the U.S. with strategic materials for stockpiling and other purposes. (Evan Just, chief of ECA's Strategic Materials Division, is in Europe now setting up the machinery for this operation.) The law also allows ECA to draw on these funds for its administrative expenses.

But the lion's share will go for recovery schemes abroad, tailored to each country's needs. ECA will screen these programs, expects to hand down its decisions this quarter.

The table below lists the probable use that the Marshall Plan countries will put their counterpart funds to:

Country	Probable Use for Local Currencies
Britain French zone Ger-	Debt retirement
many	Industrial reconstruction
France	Balance budget, indus-
*. 1	trial reconstruction
Italy	Industrial reconstruction, debt retirement
Austria	Capital goods expansion
Denmark	Industrial reconstruction
Netherlands	Industrial reconstruction,
	balance budget
Norway	Industrial reconstruction
Belgium	Capital goods expansion
Greece	Balance budget
Trieste	Industrial reconstruction
Bizonia	Industrial reconstruction
China	Balance budget

Other developments:

• Authorizations—For the week ended Aug. 14, procurement authorizations totaled \$104,941,449. Food—with \$43-million—topped the commodity list again. Other big items: \$8.8-million for fats and oils; \$8.1-million for ferro-alloys and nonferrous metals; just under \$4-million for tobacco; \$3.4-million for steel; and around \$2-million each for animal feed and chemicals. The U.S. was the big supplier.

Bizonia got the largest cut—\$27-million, mostly for foods, fats and oils. Suppliers included such far-flung countries as Mozambique (Portuguese East Africa), the Philippines, Mexico, and Iceland, as well as the U.S. The Netherlands got \$10-million for steel and

nonferrous metals to be bought in the U. S., Canada, and Peru. Italy got \$9-million for U. S. wheat; Greece, \$8-million for wheat, chemicals, and fertilizer, to be supplied mostly from the U. S.

Smaller amounts went to Norway, Denmark, Austria, Belgium, Trieste,

and China.

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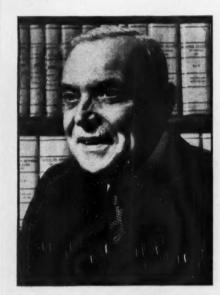
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• Regulations—Agents and freight forwarders, handling group shipments of ECA-approved relief packages for Europe and China, can get a freight subsidy from ECA. Depending on the destination, subsidies range from 1.35¢ to 2.2¢ a lb. for food packages, 2¢ to 4.4¢ a lb. for nonfood packages. Application for subsidies must be made to the ECA administrator within 30 days of shipment.

#### Reports from Abroad

The Organization for European Economic Cooperation has started the feathers flying in Paris over the divvy-up of U.S. aid. The Greek, Turkish, and Bizonal delegates are the malcontents. None of the three got as big a share of this year's allocations as asked for. Despite the fact that OEEC is conducting its meetings in secret, the tension between the member nations leaked out. There's also a rift right in the U.S. family. W. Averell Harriman's Paris staff and Gen. Clay's advisers don't see eye to eye over western Germany's share of ECA funds.



#### Canada's Next Premier

Louis S. St. Laurent, recently elected head of Canada's Liberal Party, is expected to become the next Prime Minister. The current premier, W. L. Mackenzie King, will retire in a month or so after 21 years in office.

St. Laurent, a French-Canadian, was formerly a corporation lawyer, and wartime Minister of Justice.

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## THE TREND

## Inventory Signals

Are the pipelines of industry filling up? That question has been asked repeatedly ever since the end of the war. And now, three years after V-J Day, it is possible to say that they are. It is not the case, of course, for every industry nor for every product of an industry. But it is true in general about an increasing number of businesses and products.

One proof is offered by a study of statistics on inventories. Two weeks ago we ran a series of charts which told the story (BW-Aug.7'48,p22). Those charts revealed that (1) manufacturers this year haven't been increasing their inventories of raw materials and purchased parts; (2) goods-in-process inventories are not moving up noticeably any more; but (3) inventories of finished goods are climbing.

That sort of thing doesn't happen when all manufacturers have big backlogs of orders to fill. Then the stuff is shipped out as fast as it can be made.

But it is obvious now that more and more companies are no longer putting customer requests on back order, but are able to ship from stock. In fact, factory stocks are up day by day. Dept. of Commerce figures indicate that the stocks of finished goods are now double their prewar level. It is true that, because of price rises, the physical size of the inventory is not double. But industrial prices haven't risen enough to account for all of that bulge.

The figures also show that the rise in inventory has been much swifter in the nondurable goods fields than in durable lines. Apparently, the soft-goods people are not too upset about the situation. They figure that fall buying will lick the inventory problem and put the mills back on a comfortable basis again.

That may or may not happen. It may be that everything will pan out all right this year. But if buying lags, there will be storm signals flying.

If, for example, retailers withhold orders, the manufacturers and wholesalers supplying them will get a jolt. Producers of soft goods are not going to get orders while their outlets are burdened with stocks that are either slow-moving or not selling at all. That is the usual adjustment made to bring inventories and sales into balance.

The greatest danger in inventories probably is speculative buying. This is typical at a time when price inflation is rampant. Inventory speculation is a common characteristic of business booms while inventory liquidation is the trademark of business recessions.

Businessmen who experienced the postwar bump of the early 1920's remember only too well what an important part inventories played in that business recession. Heavy losses were taken on all kinds of inventories. And any inventory crisis always spreads through the economy. 'Vhen the man with a long inventory stops buying, his supplier stops buying, too. And so on down the line. And, as buying stops, worker layoffs begin.

Careful study and supervision of inventories by all businessmen, we think, can prevent or minimize such a disaster. A prominent merchandiser told us that he believes the information businessmen have today compared with 1920 is the best insurance there is against a severe business depression. We are inclined to agree with him. There is little reason, certainly, for ignoring inventory signals at this stage of the game.

## Who Owns Offshore Oil

New discoveries of oil during the past fortnight in the Gulf of Mexico reemphasize the importance of a final decision on the ownership and control of offshore oil. Is title to the tidelands held by the states or by the federal government?

That question led to a long and drawn-out fight. It began in 1937. The extensive Wilmington-Long Beach (Calif.) offshore field was discovered then. Shortly afterward, the federal government tried to have the deposits off the coast of California set aside as a naval oil reserve. This eventually led to the filing of a test suit in 1945 to establish whatever rights the U. S. government had in offshore petroleum deposits.

The federal claim to ownership of those good and potentially good oil resources drew opposition. The oil companies that were operating in the tidewater areas or were preparing to do so naturally were active opponents. So were the various states involved, for they were the owners if the federal government was not.

Last year, the U. S. Supreme Court ruled that the federal government had paramount rights over the natural resources of the seabed of the continental shelf. But almost immediately there was an effort made to get Congress to pass a law upsetting the decision. Congress quit before it completed action on the proposal.

Offhand, it doesn't seem to make much difference who wins the contest. We are not impressed by the argument of states' rights used by the states and the oil companies. We were not impressed by the claim made by Washington officials that national defense would be strengthened if title were vested in Uncle Sam.

We have only one reason why we think the property should be put in the hands of the states: If the federal government has the title, it might decide to fence off the entire offshore area or big parts of it as a naval oil reserve and permit no development of those fields. That would be as shortsighted a national defense move as we can imagine at the moment. The biggest boon to national defense—as far as petroleum supply is concerned—is to have the offshore area fully explored, developed, and producing oil. It would also serve the public interest to see that development proceed apace before a war catches up with us again.

